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Casper District Office

Platte River Resource Area May 1992

Final
Bald Eagle Habitat Management Plan
for the Platte River Resourse Area and Jackson Canyon ACEC

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Department of the Interior
Bureau of Land Management
Casper District
Platte River Resource Area

FINAL

PLATTE RIVER RESOURCE AREA

AND

JACKSON CANYON ACEC

BALD EAGLE

HABITAT MANAGEMENT PLAN

Environmental Assessment No. WY-062-2-006

May 1992

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ABBREVIATIONS

ACEC	Area of critical environmental concern
BA	Biological Assessment
BLM	U.S. Department of the Interior, Bureau of Land Management
BOR	U.S. Department of the Interior, Bureau of Reclamation
CMA	Cooperative management agreement
DEQ	Department of Environmental Quality
EA	Environmental analysis
EIS	Environmental impact statement
ESA	Endangered Species Act
FMSE	Foothills and mountains southeast
FWS	U.S. Department of the Interior, Fish and Wildlife Service
HMP	Habitat management plan
HPSE	High plains southeast
mbf	Thousand board feet
mmbf	Million board feet
MLRA	Major land resource area
MOU	Memorandum of understanding
NP	Northern plains
NEPA	National Environmental Policy Act of 1969
NWF	National Wildlife Federation
ORV	Off-road vehicle
PILT	Payment in Lieu of Taxes
PRRA	Platte River Resource Area
RMP	Resource management plan
ROD	Record of decision
R&PP	Recreation and public purpose
SCS	U.S. Department of Agriculture, Soil Conservation Service
U.S.	United States
USFS	U.S. Department of Agriculture, Forest Service
USGS	U.S. Department of the Interior, Geologic Survey
VRM	Visual resource management
WR	Wind River
WGFD	Wyoming Game and Fish Department

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CHAPTER 1: INTRODUCTION

REASONS FOR PREPARATION

The Bureau of Land Management (BLM), Platte River Resource Area (PRRA) office is located in Mills, Wyoming. The PRRA is one of three resource areas in the BLM Casper District. The PRRA's area of responsibility is Natrona, Converse, Platte, and Goshen counties in Wyoming (map 1). In the resource area, BLM administers approximately 1.4 million acres of public land surface, and approximately 4.7 million acres of federal mineral estate under nonfederally owned surface estate. Resources and land uses managed on the public lands include: wildlife habitat, minerals, recreation, cultural and historic values, access, soils, water, air, vegetation, timber, visual, and fire.

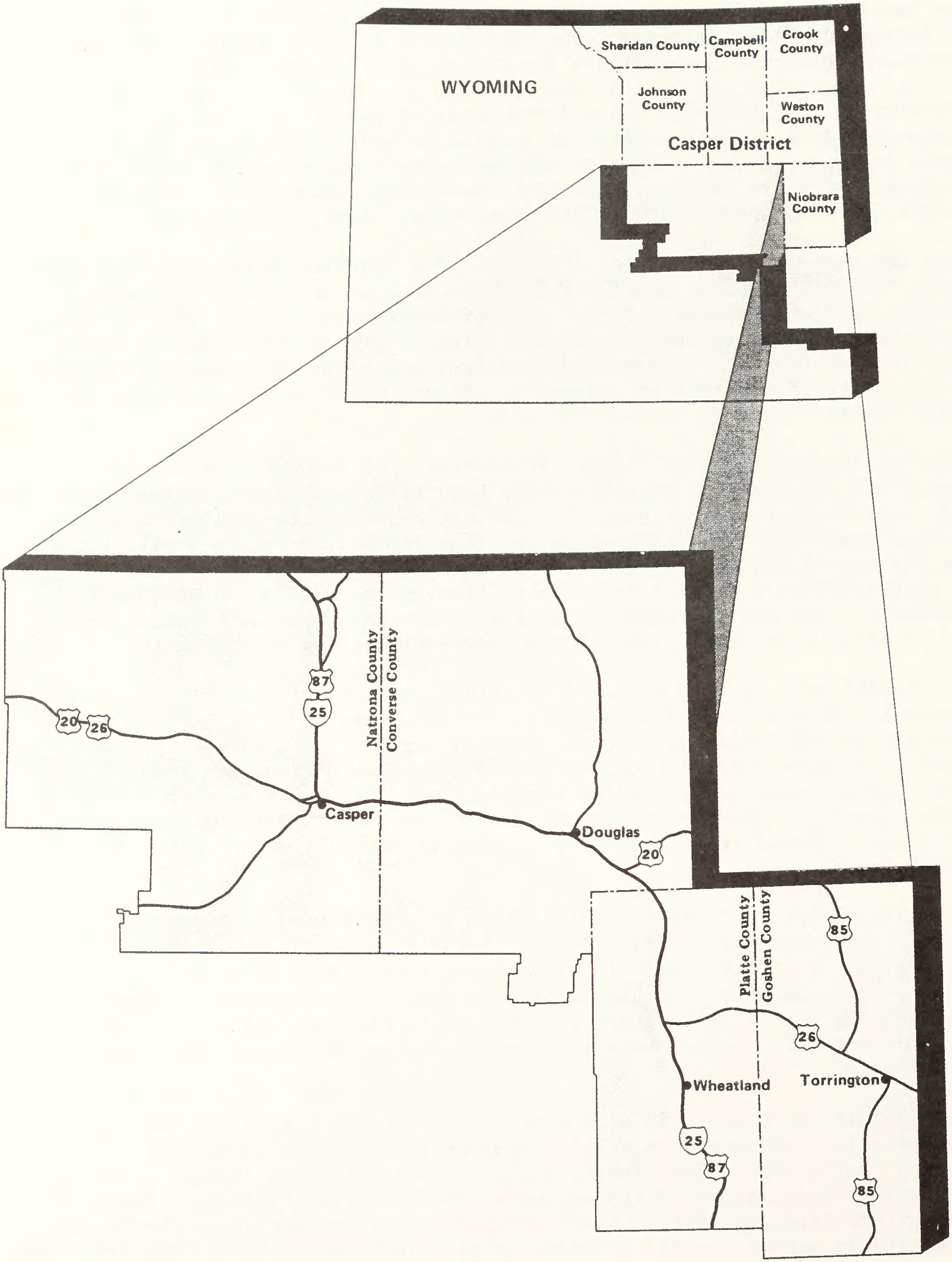
Land use decisions made in the 1985 BLM, PRRA Resource Management Plan (RMP), state "We will complete the Jackson Canyon Area of Critical Environmental Concern Habitat Management Plan. Wildlife management actions will be aimed at protecting significant bald eagle and golden eagle roosts." RMP decisions require that BLM PRRA prepare and implement a habitat management plan (HMP) for the area of critical environmental concern (ACEC) and other known bald eagle habitat areas in the resource area.

Although the environmental impact statement (EIS) prepared for the RMP identified and analyzed potential land uses which would not be compatible with bald eagle use of habitat areas, it did not provide site-specific analysis of defined proposals. The RMP recognized that further, in-depth analysis under the Endangered Species Act and the National Environmental Policy Act of 1969, as amended (NEPA), through an activity plan in the form of an HMP, would be necessary. The HMP is needed to analyze known and reasonably foreseeable future actions on public lands where bald eagle habitat is present.

The significance of bald and golden eagle habitat within Jackson Canyon and nearby Little Red Creek Canyon was first identified in 1971, when poisoned bald and golden eagles were found in the canyon. This area was the first known bald eagle roost in the Casper area. As a result of the efforts of local conservation groups and private landowners in the area, and following public meetings, Jackson Canyon and Little Red Creek Canyon was designated a "Rare and Uncommon Area" by the Wyoming Environmental Quality Council on August 8, 1978.

During development of the PRRA BLM's 1978 to 1980 Natrona management framework plan (a land use plan), public input related to wildlife was instrumental in designation of 11,150 acres of public land encompassing Jackson Canyon and Little Red Creek Canyon as the Jackson Canyon ACEC. The ACEC designation was continued by decisions in the 1985 RMP, and specific decisions were made in the RMP to restrict other uses which were not compatible with bald eagle use of the area.

The recognition of mountain pine beetle outbreaks on Casper and Muddy mountains in 1980 added a highly controversial aspect to management of the Jackson Canyon ACEC. The Wyoming State Forestry Division, Casper Mountain Pine Beetle Association, Natrona County Parks Department, Natrona County Agriculture Extension Office, and many private landowners urged the BLM to undertake an active control program. Public land in the Little Red Creek area was named as one of the heavy infestation areas. Some members of the Murie Audubon Society and The Nature Conservancy initially urged the BLM to let nature (that is, the beetles) run its course. Basically, these parties were opposed to the use of pesticides, or the improvement of roads and trails for mountain pine beetle control.



Map 1
Platte River Resource Area

The BLM initiated mountain pine beetle control in the Jackson Canyon ACEC in 1982, after finding a significant number of trees killed by the beetles in the Little Red Creek and Jackson Canyon roosts. The BLM's mountain pine beetle control consisted of cutting infested trees, burning, baiting and trapping, and spraying with ethelene dibromide and lindane. Throughout the control programs each year, close coordination was maintained with concerned public, agencies, and individuals.

ACEC management, particularly the mountain pine beetle control, has been achieved through normal budget allocations or fortunate availability of funds and manpower. As such, this has demanded additional support by the BLM district and state office staffs. Manpower and supplies have also been provided by the Wyoming State Forestry Division, Natrona County Parks Department, and Casper Mountain Pine Beetle Association when BLM funds were not readily available or adequate. The United States Fish and Wildlife Service (FWS) and the Wyoming Game and Fish Department (WGFD) have provided support and consultation, but they would benefit from a plan which details all of the BLM's future actions for the bald eagle habitat in the ACEC. A comprehensive, coordinated approach, guided by a plan, is needed for the efficient use of resources in management of the ACEC.

Recently there has been increasing interest in developing the limestone present in and adjacent to the ACEC. In March 1987, limestone mining was proposed by the State of Wyoming, Wyoming Highway Department, on state lands in the southwest corner of the ACEC. This 40-acre parcel lies on Little Red Creek, and contains an excellent outcrop of Alcova Limestone with very little overburden. The proposal included a haul road right-of-way across BLM-administered lands to reach the limestone. The right-of-way application was denied by BLM since that use would conflict with planning decisions and management of the ACEC.

A second attempt to access the 40-acre parcel of state land was made by Rissler & McMurry Company in May 1989. Their proposal would access the limestone deposit via private land, thus by-passing BLM lands and any control BLM could exert. Because the proposed quarry posed risks to the ACEC, BLM interceded with a proposal to the state of Wyoming to acquire this 40-acre parcel from the state through a land exchange. The state suspended processing the quarry site proposal pending evaluation of the exchange. Local landowners and conservation groups, many of which had participated in the designations of Jackson Canyon, also interceded in opposing road construction and mining.

While this land selection process was ongoing, Rissler & McMurry Company was making plans to quarry limestone from Bessemer Mountain, and also searching for other limestone deposits. One such deposit is located adjacent to the west boundary of the ACEC on public lands. Refinements to the exchange have been proposed such that the BLM-administered lands containing limestone deposits adjacent to the ACEC would be transferred to the state. BLM would then acquire the 40-acre state parcel, other state lands within the ACEC, and could include the state lands at Bessemer Mountain. State lands at Goldeneye Reservoir could also be considered for acquisition by BLM.

While interest in limestone mining in or near the ACEC has been an important consideration, the Wyoming BLM has also been actively pursuing a statewide land exchange with the state of Wyoming. Negotiations have been ongoing for the past five years, with actual identification of land parcels being undertaken the last two years. BLM's goals in a statewide land exchange are to consolidate the public lands, to eliminate isolated inholdings wherever possible, and to allow for more economical, efficient land management. The PRRA BLM has been interested in acquiring state of Wyoming lands within the ACEC since RMP decisions identified that as beneficial for management of the ACEC. State lands identified by BLM for acquisition by exchange in the last two years are listed in appendix A.

When the RMP was completed in 1985, there were no known bald eagle nest sites in the PRRA. Over the past five years, three actively used bald eagle nests were discovered. At least two pairs of bald eagles are now staying year-round in the PRRA, a sign that significant bald eagle nesting habitat is present and is being used. During scoping for this HMP, a nest located near the Edness Kimball Wilkens State Park was believed to be actively used by nesting bald eagles. However, information obtained during HMP preparation has revealed that bald eagles have abandoned that nest and perhaps relocated at the Careyhurst nest. Therefore, it will not be included in the HMP, and only the two active nests will be addressed.

In addition, only three winter night roosts (the ACEC, Pine Mountain, and Boxelder) were known to exist in the PRRA in 1985 when the RMP was completed. Since then, more roosts have been identified within the resource area. Lands in the PRRA containing habitat suitable for bald eagle roosting are receiving increased use by bald eagles.

Since nest sites or roosts are located on lands where federal minerals may be or are leased for oil and gas, the PRRA has recognized a need to address how oil and gas leasing and development may impact these bald eagle habitats. In addition, mineral materials are present on some nest, roost, and feeding habitat areas along the North Platte River. There is interest in these sand and gravel deposits for use as building materials in road construction and maintenance.

These areas of bald eagle nesting, winter roosting, feeding, and flyway habitats are in need of site-specific management to accomplish RMP goals and to ensure that BLM's management conforms with the many laws relating to the endangered bald eagles. Without the specific direction an HMP would provide, these habitats would be subject to proposal-driven analysis on a case-by-case basis as individual uses were proposed on the lands within or near the habitats. As required, the HMP includes an environmental assessment (EA) to analyze identified alternatives affecting bald eagle habitats.

During scoping for the HMP, comments received from the public and groups with interests in the management of bald eagle habitat areas resulted in identification of habitat management issues, and in BLM identifying alternatives to address those management issues. Following a public comment period on the draft HMP, a review of the comments received resulted in BLM identifying an additional management alternative for consideration, and in revision of some of the environmental consequences identified for previously analyzed alternatives. In addition, more detailed biological information about bald eagle behavior and habitat areas is included in the final HMP.

The public's active participation during HMP preparation, and the outspoken interest in management of bald eagle habitat areas demonstrates a widespread public concern with management of that habitat on the public lands.

This HMP describes the BLM's management objectives, planned actions, budget requirements, and needed support from other agencies, groups, and individuals. The status of bald eagles as an endangered species, the controversy of mountain pine beetle control near the Jackson Canyon ACEC roosts, and the potential for a state-BLM land exchange all indicate that an HMP is needed. Further, the high public interest in bald eagle habitat management, the interest in development of minerals in or near bald eagle habitats, and the fact that the wintering eagle population in the resource area is of regional significance, show the need for an HMP for bald eagle habitat in the ACEC and the PRRA as a whole.

AUTHORITY AND RELEVANT CONSTRAINTS

Authority for the protection of bald eagles and their habitats, and for development and implementation of this HMP, is provided by a number of federal and state laws. Relevant constraints include memorandums of understanding, BLM manual sections in the 6700 and 6800 series, and RMP decisions.

This HMP and EA is prepared in accordance with the Council of Environmental Quality requirements (43 CFR 1500) which implement NEPA. Before a decision is reached selecting a planned action alternative, a determination of whether the planned actions conform with BLM planning, and are not inconsistent, to the extent practical, with state and local planning must be made. If this HMP finds that an alternative is not in conformance with BLM planning, the finding could be that the specific RMP decision(s) should be amended in accordance with appropriate authorities and guidance, or that an alternative which is in conformance with the plan be selected.

AUTHORITY FOR THE HMP

Statutory authorities relevant to preparation and implementation of this HMP are summarized below.

Bald Eagle Protection Act of 1940 (16 U.S.C. 668)

This act prohibits, as a criminal offense, the taking, possession, or destruction of bald and golden eagles or any part, egg, or nest thereof.

Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701, PL 94-579)

This act is BLM's basic legislative mandate. FLPMA requires BLM to develop or revise land use plans so that scarce resource values are considered and gives priority for protection of those resources. Fish and wildlife development as a principal or major use of public lands is also included under this act.

Endangered Species Act of 1973, as amended (16 U.S.C. 1531)

As a listed species the bald eagle is afforded broad protection under this legislation. Section 7 of the act requires all federal agencies to consult with the FWS when their activities may jeopardize the habitats of endangered species. Section 7 applies to discretionary federal activities or programs of any kind authorized, funded, or carried out (in whole or in part) by a federal agency. Consultation provisions under this act do not apply to private or state entities. However, if there is a taking of threatened or endangered species as a result of private or state actions, the FWS is responsible for implementing the enforcement provisions of the act. Consultation with the FWS under the Endangered Species Act is explained in more detail in Appendix B.

The Sikes Act of 1960 (Title II, Section 202(c)(3)) (16 U.S.C. 670 a-f)

This act provides protection for fish and wildlife considered to be rare, threatened, or endangered by a state agency. It also provides for the preparation and implementation of joint BLM-state HMPs for endangered species.

Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711)

This act establishes a federal responsibility for the protection of international migratory bird resources.

Executive Order 11990 of May 1977 (Protection of Wetlands)

This order directs federal agencies to minimize the destruction, loss, and degradation of wetlands, and to preserve and enhance the beneficial values of wetlands. In administering its activities, agencies must evaluate the effects of the proposed actions on the survival and quality of wetlands. All federally initiated, financed, or permitted construction projects in wetlands must include all practical measures to minimize adverse impacts. All leases, rights-of-way, easements, and disposals involving federal wetlands must contain restrictions to uses by the grantee which are consistent with federal, state, and local wetland regulations.

Executive Order 11988 of May 1977 (Floodplain Management)

Under this order, each federal agency is directed to evaluate the potential effects of its actions on floodplains and to ensure that its planning programs and budget requests take flood hazards and floodplain management into account. Federal agencies are to take actions to reduce the risk of flood loss, to minimize the impacts of floods, and to restore and preserve the natural and beneficial values of floodplains.

RELEVANT CONSTRAINTS

Relevant constraints applicable to this HMP are discussed below.

BLM/WGFD Master Memorandum of Understanding (MOU), March 1990

As outlined in this MOU, the general objectives of the wildlife resource cooperative efforts by the BLM and WGFD are:

1. To conduct a coordinated program of wildlife resource administration (annual meetings, training, permits, use authorizations, cooperative agreements, etc.) to ensure the existence of healthy wildlife populations and wildlife habitat consistent with WGFD strategic plan goals for wildlife populations and BLM multiple-use objectives.

2. Participate in the planning efforts of each respective agency (WGFD strategic plans, BLM land use plans, habitat management plans, etc.) to provide adequate information input and a coordinated management direction for the wildlife resource on public lands in the state of Wyoming.

BLM Manual 6780, Habitat Management Plans

This manual section provides policy and procedures for the development of activity plans for BLM's wildlife program. These specific plans, referred to as HMPs, will serve as comprehensive plans developed cooperatively with the various state agencies under authority of the Sikes Act.

BLM Manual 6840, Threatened and Endangered Wildlife

This manual section states that BLM's policy is to protect, conserve, and manage federally listed and state-listed threatened and endangered animals and their habitats, and to use Bureau authority to carry out the purposes of the Endangered Species Act and similar state laws.

BLM, Platte River Resource Area Resource Management Plan (1985)

Specific land use decisions and prescriptions for resource management units (RMU) are found in the record of decision (ROD) for the RMP and are listed below. The planning decisions are identified in many cases by a designated letter and number (for example R1 is recreation decision number 1), or can be found in the "Management Prescriptions" section of the ROD that outlines decisions for RMUs.

Decisions marked with an asterisk constrain, prohibit, or limit surface development on public lands. They apply to all land use proposals that involve surface development and require BLM authorization. More details on these decisions can be found in the "Planned Actions" section. In that section, where Alternative A represents decisions from the RMP, the land use decision number and the page on which it appears in the ROD is listed.

Planning Decisions

M1	Oil and gas (pp. 9, 10)
M3	Salable minerals (p. 11)
M4	Locatable minerals (p. 11)
FM3	Fire suppression in bald eagle roost areas (p. 11)
*F2	Allowable cut (p. 12)
L1	Land disposition (pp. 13 - 22)
*L2	Withdrawals (p. 22)
L4	Access (p. 23)
*R1	Recreation area management plans (p. 24)
R2	Off-road vehicles (p. 25)
*SWA3	Soil protection (pp. 25 - 27)
*SWA4	Slope restrictions (p. 27)
*WL1	Habitat management plans (p. 28)
*WL6	Bald eagles (pp. 29 - 30)
*WL7	Raptors (p. 30)
*SD4	Jackson Canyon ACEC (wildlife) (p. 31)

Prescriptions for Resource Management Units

RMU 7: North Platte River (pp. 54 - 59)
RMU 8: Casper Mountain-Muddy Mountain-Jackson Canyon (pp. 59-63)

Code of Federal Regulations (CFR)

Most existing land uses, actions BLM initiates, or proposals from the public that BLM has authority to assess or approve, are subject to regulations found in Title 43 CFR, which implement the applicable legislation. Most wildlife-related regulations are found in Title 50 CFR. The applicable regulations for existing land uses and some of the most likely future actions are discussed below. To clarify administration of public land under the General Mining Law of 1872 and 43 CFR Part 3809, a more in-depth discussion of those regulations is provided.

43 CFR Part 1600 - BLM land use planning, such as preparing or amending an RMP, is conducted in accordance with these regulations. Specific to this HMP, if amendment of the RMP is necessary as a result of selection of any alternative these regulations would apply. Generally, land use planning actions are BLM-initiated.

43 CFR Group 2000 - General land resource management is included in these regulations. The procedures for acquisitions (43 CFR 2100), exchanges (43 CFR 2200), withdrawals (43 CFR 2300), and rights-of-way (43 CFR 2800) would be followed to implement alternatives that included these actions. Usually, acquisitions and withdrawals are initiated by BLM; exchanges could be proposed by any party owning lands (federal or non-federal); and, rights-of-way are initiated by any party desiring to use public lands for right-of-way purposes (roads, pipelines, telephone and power lines, and communication sites).

43 CFR Group 3000 - Minerals management is performed under these regulations. The most common minerals actions addressed in this HMP affect leasable, salable, and locatable minerals. Oil and gas leasing and development are guided by 43 CFR 3100. Disposal of mineral materials, or salable minerals, are covered in the 43 CFR 3600 regulations. Mining claims for locatable minerals under the general mining laws are governed by the regulations in 43 CFR 3800.

BLM manages oil and gas leases on lands where the surface and mineral estate are federal, and where the surface estate is privately owned and the mineral estate is federal. Lease parcels must initially be offered for competitive bidding, but if not leased are then available for over-the-counter offers from the public. BLM usually identifies parcels offered for bid, but the public may also nominate parcels to be considered for oil and gas leasing.

If a well capable of producing oil and gas in paying quantities is not developed before the lease expiration date, the lease may expire. Development of a well capable of production extends the lease term for the period that the well produces. Some older oil and gas leases may be renewed under lease terms whether or not producing wells are developed. Before previously unleased land parcels, or parcels where leases have expired, are offered for bid BLM reviews land use planning documents and site-specific activity plans (such as an HMP). As appropriate, stipulations are attached to parcels or the parcels are withheld from leasing.

Mineral materials (common varieties of sand, gravel, and stone) are usually sold (or given for free use to governmental entities) after a party requests purchase or use of those minerals. However, BLM may also offer areas for common use or community pits, subject to purchase of the materials by individuals.

Mineral materials can be sold noncompetitively or competitively. The noncompetitive, negotiated sale is the most commonly used method and is employed primarily for sales of less than 100,000 cubic yards of material. Competitive sales are required when the projected sale volume is over 100,000 cubic yards, or where there is a likelihood of competitive interest in the proposed sale. Competitive sales can be initiated by request of a private party, or by the BLM. Competitive sales are advertised and conducted through sealed and/or oral bidding. A minimum acceptable bid is established by an appraisal of the fair market value of the subject material, and a bid deposit is required. The bid winner enters into a contractual agreement with the BLM for sale of the material.

Locatable minerals, such as gold, silver, and copper, can be claimed and mined under the general mining laws. Development of valid claims can lead to patent of the minerals to the claimant. Mining claim procedures are outlined in the 43 CFR 3800 regulations. Mining claims fall into two basic categories: those subject to notice requirements, and those requiring a plan of operations.

A notice of intent must be filed with the BLM authorized officer by all operators on project areas where locatable mineral mining operations cause a cumulative surface disturbance of five acres or less during any calendar year. Notification of such activities by the operator are required at least 15 calendar days before commencing operations. Approval of the notice by the BLM is not required. The processing of a notice does not constitute a federal action, and as a result, planning decisions which normally prohibit, constrain, or limit surface development may not apply.

The regulations require that all operations, including casual use and operations under either a notice or a plan of operations, be conducted to prevent unnecessary or undue degradation of the federal lands, and that such operations comply with all pertinent federal and state laws including (but not limited to) fisheries, wildlife, and plant habitat. The operator must take such action as may be needed to prevent adverse impacts to threatened or endangered species and their habitat that may be affected by operations.

BLM Manual 3809 sets out procedures BLM follows when potential conflicts with threatened or endangered species are discovered. According to the manual, "If the processing of a notice reveals that a potential conflict with a threatened or endangered species exists, (BLM will) notify the operator and the mining claimant of the conflict by telephone and certified mail. Advise the operator not to proceed and state that a knowing violation of the taking provisions of the Endangered Species Act (ESA) will result in a notice of noncompliance and may result in criminal penalties. If the operator wishes to develop measures that will eliminate the conflict, the authorized officer will arrange for the participation of BLM biologist, geologists, and, if needed, the FWS during the process of developing the measures." Because BLM has no approval authority for notice level activities, proposals made under a notice are nondiscretionary, and BLM has no authority to enforce provisions of the ESA.

The regulations and BLM Manual 3809 (appendix C) state that plans of operations are required when an operation will disturb more than five acres in any calendar year, or for any level of activity exceeding casual use in one of the special category lands, including designated ACECs. The regulations require an operator to submit to the authorized officer a proposed plan of operations for review, analysis, and approval. These regulations do not provide for the rejection or denial of a mining plan of operations, but approval may be refused until appropriate mitigation measures are provided for in the plan.

In short, the BLM can require an operator to submit a plan of operations in lieu of a notice of intent if the proposed operations will occur within an ACEC or other special category lands. Mitigating measures to protect threatened and endangered species and their habitats may be made a requirement of any plan of operations prior to approval by the authorized officer. Notice-level activity outside special category lands are subject only to the provisions of other state and federal laws such as the Endangered Species Act, which must be enforced by the appropriate state or federal agencies.

43 CFR Group 4100 - Administration of livestock grazing on public lands is performed in accordance with these regulations. Grazing uses include livestock grazing, trailing, range improvement projects, and inventory and monitoring.

43 CFR Group 5000 - Forest management actions initiated by BLM, including timber sales or forest improvement projects, are governed by these regulations.

43 CFR Group 8000 - BLM recreation programs, such as development of sites, and cultural and visual resource management, are guided by these regulations. In particular, off-road vehicle (ORV) designations are established under 43 CFR Part 8340, and penalties for violations of the regulations are established under 43 CFR Part 8360.

43 CFR Group 9200 - BLM's fire management program regulations are found in 43 CFR 9210, and procedures and penalties for trespass uses on public lands are in 43 CFR 9230.

50 CFR Parts 10, 17, 23 and 402 - Although these regulations are primarily used by FWS, BLM is guided in wildlife habitat management by them as well. These regulations provide guidance for actions affecting the habitat of migratory birds, threatened and endangered species, and they outline interagency coordination.

CHAPTER 2: AFFECTED ENVIRONMENT

INTRODUCTION

This HMP addresses bald eagle habitat areas on public lands, including federal mineral estate under privately owned surface estate, administered by the BLM, PRRA. PRRA's area of responsibility is Natrona, Converse, Platte, and Goshen counties in Wyoming.

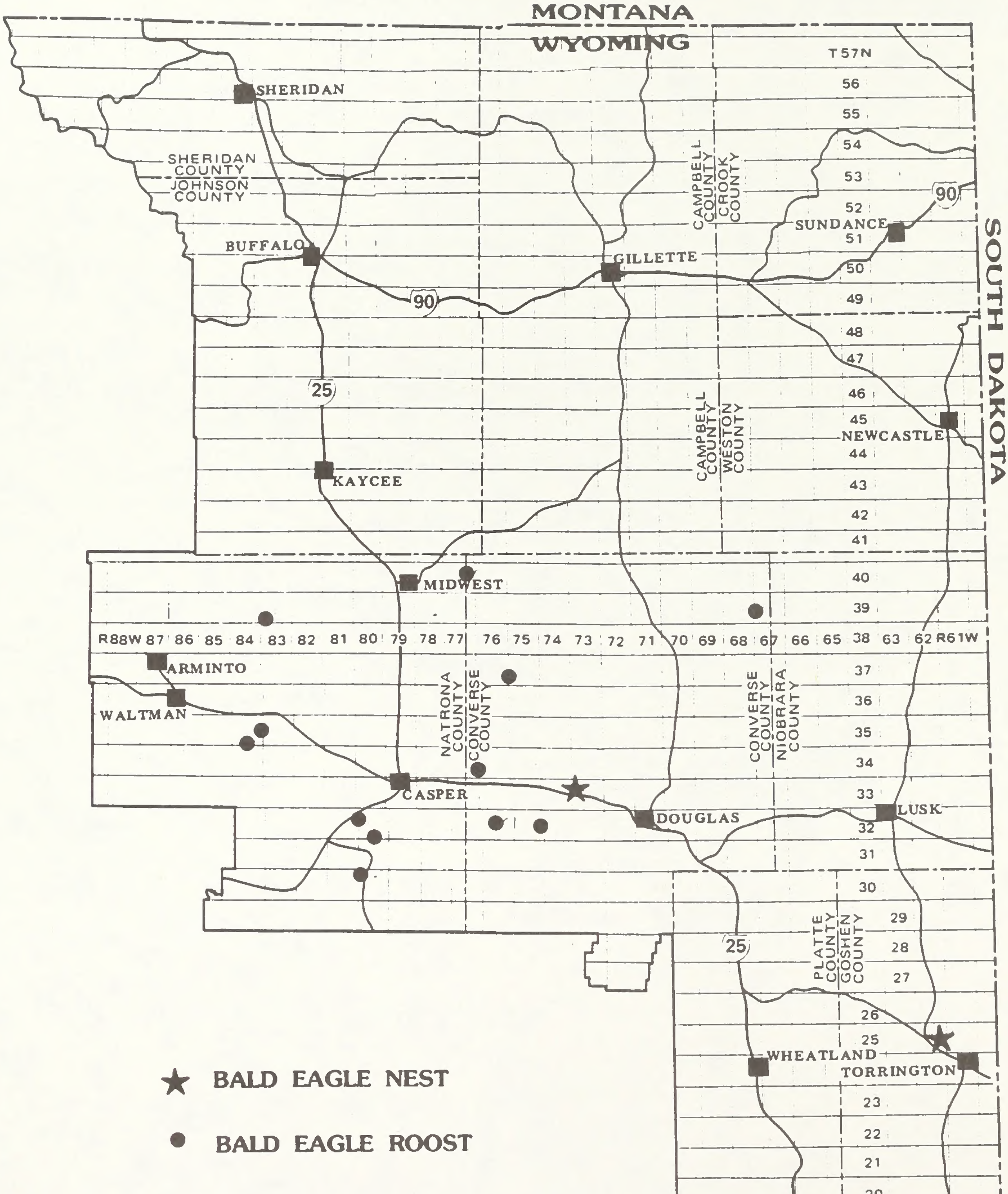
The bald eagle habitat areas that are addressed in this HMP are listed below.

- Bald Eagle Roosts:
  - Jackson Canyon ACEC
  - Stinking Creek Roost
  - Cole Creek Roost
  - Boxelder Creek Roost
  - Little Deer Creek Roost
  - Pine Mountain West Roost
  - Pine Mountain East Roost
  - Big Sulfur Springs Roost
  - North Fork Cheyenne River Roost
  - Pine Ridge Roost
  - Miller Hills Roost

- Bald Eagle Nests:
  - Careyhurst Nest
  - Rawhide Nest

- Bale Eagle Feeding Habitat Areas:
  - North Platte River
    - Petes Draw
    - Ledge Creek
    - Government Bridge
    - Bolton Creek
    - Clarkson Hills
    - Gray Cliff
    - Bessemer Mountain
    - Bessemer Bend
    - Emigrant Gap Ridge
    - Big Muddy
    - Parkerton
    - Welch
    - Gedney Draw
    - LaBonte
  - Rangelands
    - (Includes public lands in Natrona, Converse, Platte and Goshen Counties)

- Bald Eagle Flyways:
  - Oil Mountain Flyway
  - Emigrant Gap Ridge Flyway
  - North Platte River Flyway
  - Coal Mountain Flyway
  - Bates Creek Flyway



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Casper District Wyoming

MAP 2

Map 2 shows these habitat areas. The legal descriptions and maps of roost areas are included with the affected environment discussion of each roost. The specific legal description of nests will not be provided in the draft or final HMP made available to the public. In part, this is in response to WGFD comments discouraging publication of nest locations in a public document. Specific legal descriptions of all feeding habitat areas and bald eagle flyways is not attempted in this HMP. However, public lands known to be present within the North Platte River feeding habitat are identified, and a map showing the flyways, are included with the affected environment discussion for each of these habitat areas.

Resource values common to the habitat areas is outlined at the beginning of each habitat type. The general setting and legal description of each roost and feeding habitat area is described as part of the affected environment discussion for each habitat area.

Cumulatively, there are 51,198.05 acres of land included in bald eagle roost and nest areas considered in this HMP. Of these lands, 15,109.14 acres (29.5%) are federal surface and federal minerals. Federal minerals underlying nonfederal surface account for 23,414.80 acres (45.7%). The total federal mineral estate included in these habitat areas is 38,523.94 acres (75.2%). There are 12,674.11 acres (25.0%) of nonfederal surface and minerals lands within the boundaries of the roost and nest habitat areas.

The existing land use decisions, management objectives, and planned actions outlined in this HMP do not apply to these private surface-private mineral lands unless such is specifically stated in the "Planned Actions," "Affected Environment," or "Environmental Consequences" sections. The land use decisions, management objectives, and planned actions do not apply to private surface owner land uses unless those are related to use of the federal mineral estate. A breakdown of surface and mineral ownership for these habitat areas is included with the affected environment discussion of each.

In the discussions contained in the "Land Use Capability" section and other resource sections for each habitat area, reasonably forseeable future actions are identified regardless of land ownership or habitat boundaries to allow consideration and analysis of cumulative and residual impacts, and identify if there would be irreversible and irretrievale commitments of resources under the alternatives considered.

BALD EAGLE ROOSTS

RESOURCE VALUES COMMON TO ALL ROOSTS

Land Status

Within each of the roost areas, ownership of the land and mineral estates is dispersed between federal, state, and private owners. The mixed ownership has created an intermingled ownership pattern in many of the roost areas. County property taxes are not paid on federal surface lands or most state lands. However, federal lands are subject to payment in lieu of taxes (PILT) to county governments (43 CFR 1880).

Overall, approximately 16,100 acres of federal surface, 8,700 acres of nonfederal surface and minerals, and 24,000 acres of federal minerals under nonfederal surface are within the roosts. The legal descriptions of the roosts are listed in appendix D. A summary of land and mineral ownership by roost area is listed in appendix E.

Since settlement of Wyoming began, there have been a variety of homestead laws and other public land laws used to authorize transfer of land titles from the federal government into private ownership. The early homestead laws prohibited homesteads on mineral lands. Those early homestead patents (commonly called deeds) transferred to the homesteader all interests in the land including whatever unknown minerals might have been present. Beginning around 1909, the General Land Office, BLM's predecessor, began issuing land patents for mineralized lands, but it reserved to the United States (U.S.) some or all of the minerals underlying these lands. The 1909 law authorized homesteads on lands containing coal but reserved the coal to the U.S. In 1910 a similar law authorized reservation of coal and other minerals. The Stock Raising Homestead Act (1916) reserved all minerals in the lands to the U.S. Lands of this type in which the mineral ownership has been severed from the surface ownership are often referred to as "split estate" lands.

Many acres of split estate lands are present in Wyoming by virtue of the Stock Raising Homestead Act and similar laws, and include a reservation to the U.S. of mineral rights. Approximately 68% of the lands within the roost areas are in private ownership, though more than 80.8% of the minerals are under federal management.

Access

Physical access by means of roads or vehicle trails is not directly available to any of the roosts. This is due in part to natural limitations imposed by rugged topographic constraints and other physiographic impediments. Access has been controlled by private landownership, and current and past federal land use planning decisions have further limited road access directly into the roost sites. Legal public access to the roost sites is unavailable. However, many trails and roads are present within the boundary of most of the roost buffer areas. In several situations, trails extend within close proximity to the roost sites. The public has not identified a need for general access to these areas. Again, this may be due to the topographic limitations present.

Only a few of the many existing access roads and trails on public lands within the roost areas have been authorized. These are listed in appendix F. Most of the authorized roads and trails are associated with oil and gas drilling and development activities, historical livestock use, or recreation. Many roads and trails have been used for many years and are considered casual uses of the public lands requiring no specific authorization. Legal public access is obtained over state highways, county roads, or easements acquired by BLM or other agencies. Legal public access is distinct from physical access, since the mere presence of a road or trail does not create rights of access. Physical access is not legal public access but may be available via existing trails or roads or by cross-country travel.

Land Uses and Recreation Resources

Livestock grazing is the dominant land use on much of the land associated with the roosts, with the exception of wildlife habitat areas. Virtually all of the federal land in these areas is leased for grazing. Grazing lessees and landowners in the roosts are listed in appendix G. Oil and gas leasing and development is the primary industrial land use in the areas under consideration, though many leases are not developed. Coal mining, the other major industrial activity in the area, is concentrated in the Powder River Basin. Authorized uses of the federal lands, including oil and gas leases, are listed in appendices F and H by habitat area.

Big game hunting is the primary recreational use in the area of the roosts. This is a seasonal use, and most hunting is completed before critical roosting begins. Fishing, a year-round major recreational activity, is limited to those roosts areas along the North Platte River and Boxelder Creek. None of the other roost areas have fishing potential. All of the roosts are in the waterfowl central flyway, with waterfowl hunting occurring mainly along the North Platte River. Goose and snipe hunting extends into early January; ducks, mergansers, and coots run into late December; and most other species extend into late November. Small game and bird hunting are also popular in many of these areas. Blue and ruffed grouse seasons close November 30, near the beginning of the winter roost period. Sage grouse season closes in September before the critical period. Small game hunting, such as for rabbits and squirrels, continues throughout most of the winter, closing in February.

Recreation uses include hiking, sightseeing, photography, bird watching, rock collecting, mountain biking, and many others. The Jackson Canyon ACEC is particularly suited to bird watching because of the proximity of the area to Casper. Annual bird counts are conducted by the local Audubon Society and have been responsible for some of the population data available for bald eagles.

A natural corridor for utility lines, highways, roads, and other transportation modes, is concentrated along the North Platte River. The river also serves as a major recreational attraction throughout the region and is a concentration area for wildlife.

Forestry Resources

Ponderosa pine (Pinus ponderosa var. scopulorum) and lodgepole pine (Pinus contorta), as well as cottonwood along riparian areas, are the most important tree species associated with the ACEC, and the bald eagle roosting, nesting, flyway and feeding habitat areas. Nearly all the commercial forest base in the PRRA consists of ponderosa and lodgepole pine, with Douglas fir providing a small percentage. Cottonwood, although lacking commercial value, is an important species in riparian areas.

Ponderosa pine, also called yellow or bull pine, is distributed throughout the resource area and is found in pure stands at some locations. In the PRRA, ponderosa pine is found on discontinuous mountains, plateaus, breaks, and canyons such as Jackson Canyon, Pine Mountain, Pine Ridge and the Medicine Bow range. It is intolerant of shade and thus tends to grow in even-aged stands or in even-aged groups. In association with Douglas fir, it provides the major tree species in the Jackson Canyon ACEC, although other associated forest species includes lodgepole pine, limber pine, quaking aspen, and juniper.

Ponderosa pine is a major source of commercial timber and provides wildlife habitat, especially the larger snags that provide nesting and roosting sites. This tree species is probably the most important conifer for eagle roosting in the area. Mature stands are also used for recreation, and are considered high in aesthetic value because of the associated parklike setting.

Lodgepole pine grows in extensive pure stands, such as those on Casper and Muddy mountains, and throughout the Medicine Bow Mountains. It is an important timber species in these areas and provides valuable watershed, recreation, and wildlife habitat. It grows in association with aspen, ponderosa pine, limber pine, fir, and spruce at higher elevations. It thrives in a variety of locations in the resource area ranging from gentle slopes at high elevation to steep, rough and rocky slopes. The tree is a prolific seed producer. Lodgepole has long been regarded as a fire-maintained subclimax type.

The mountain pine beetle (Dendroctonus ponderosae) is perhaps the most destructive and aggressive insect that attacks ponderosa and lodgepole pines. Efforts to control the mountain pine beetle epidemic on Casper Mountain, including the Jackson Canyon and Little Red Creek areas, have been underway at varying intensities since 1981. Control methods have included cutting infected trees, baiting and trapping, burning, and spraying with ethelene dibromide and lindane.

Present forest management objectives in or adjacent to the Jackson Canyon ACEC include hazard reduction, stand improvement, and combatting beetles. The goal is to maintain the forest stands in healthy condition and to maintain wildlife habitat. Commercial sales of wood products in the Little Red Creek area has been limited to individual and small operator fuelwood permits. The RMP severely restricts the construction of transport roads in the area which limits the sawlog market. The timber cut was dramatically increased in 1983 and continued to 1985 to reduce or halt beetle damage through removal of infected trees or those susceptible to beetles. In 1985, a wildfire burned 852 acres in the Little Red Creek unit; 553 acres were BLM-administered lands, and 299 acres were state lands. About 50 acres of standing green timber were left in the burn area.

After allowing a period for natural regeneration of the ponderosa pine stand, technical evaluation revealed that a portion of the burn area (60 to 100 acres) required artificial regeneration. Broadcast and shelter cup seedings were attempted and were unsuccessful. In 1991, a five-year reforestation project funded by The American Forestry Association as part of the Heritage Forest - Global ReLeaf Program was initiated. Cooperative tree planting efforts are scheduled to continue through 1995.

Based on inventories of the forest base, forested public lands in the PRRA have been classified as either commercial base or woodland base. The inventory and classification identified acres of forest to these two classifications, and a volume of timber (board feet) is assigned to the commercial base. When forestlands are classified as commercial base, BLM is required to produce commercial timber from those lands. A "regulated volume" of timber that must be offered for sale from the commercial base is assigned to the PRRA through the annual budget process.

The regulated volume varies yearly, but the classified commercial forest base on the west end of Casper Mountain (BLM-administered) is 1,373 acres. The commercial base includes BLM-administered lands in Jackson Canyon (443 acres), Little Red Creek (853 acres), and Coal Mountain (77 acres). Excluding the area burned by fire (553 acres BLM-administered, or about 4 mmbf of timber), the remaining BLM commercial forest base is 820 acres containing about 4 mmbf of timber. Considering past harvests, the fire, and emphasis placed on beetle control, the forest goal outlined in the RMP ROD (p. 60) for this area has been achieved.

Harvest is restricted on the remaining available timber in the Little Red Creek unit (300 acres). No improvement of existing roads and trails is allowed, and demand for the timber is very low. About 690 of the 853 acres in this unit is in a regeneration stage (553 acres from fire and 137 acres that was harvested). These acres will not contain harvestable sawlogs for at least 80 years. In the Little Red Creek unit, 163 acres is unavailable due to slope restrictions. The commercial base in Jackson Canyon (443 acres) is unavailable for harvest due to RMP land use restrictions and because rough terrain makes it inaccessible. Commercial timber on Coal Mountain (77 acres) is sparse, containing about 0.5 mmbf, and access is not available. Presently, there is only about 163 acres of commercial base available or accessible. It is unlikely that this small amount of timber would interest a commercial venture. In concert, these lands contain about 18% of the commercial forest base in the PRRA.

Wildlife Resources

Bald and golden eagles use 11 roosts in the PRRA for overnight roosting during the winter. The first bald eagles arrive from Canada in late October. The number increases to a maximum in January, then decreases through March, with the majority of bald eagles leaving by early April to return to Canada for nesting. Generally, the mature bald eagles leave earlier to begin nesting activities, while the immature birds remain as late as April (Harmata 1984). Most of the wintering eagles fly to Canada for nesting. Several have been followed (usually with telemetry radios) from wintering areas in Wyoming and Colorado to northern Canada (Harmata 1984 and USDI, FWS 1982). The majority of the golden eagles using the roosts reside in Wyoming year-round.

Several counts to monitor use have been conducted at five of the roosts by BLM, WGFD, and FWS biologists, and by Murie Audubon Society members. Counts are coordinated among these groups to minimize human activity at the roosts. Counts were done at the remaining six roosts upon discovery. Historical and population figures of some counts of bald eagles at the roosts are shown in table 1.

Table 1

HISTORIC BALD EAGLE POPULATIONS AT WINTER ROOSTS

Bald Eagles Counted[a]	Date	Source of Data
	Jackson Canyon	
19	01-10-92	NWF[d]
44	01-13-89	BLM files
11	01-09-88	NWF[d]
3[b]	02-02-85	Patterson 1985
20	01-07-84	BLM files
32	01-07-83	NWF[d]
47[c]	02-06-80	BLM files
61	01-20-79	BLM files
62	01-21-78	BLM files
	Little Red Creek	
4	01-10-92	NWF[d]
0	01-09-88	NWF[d]
0[b]	02-02-85	Patterson 1985
5	01-07-84	NWF[d]
12	01-08-83	NWF[d]
25	01-12-80	BLM files
8	01-20-79	BLM files
	Stinking Creek	
9[b]	02-03-85	Patterson 1985
7[b]	02-02-85	Patterson 1985
	Cole Creek	
7[b]	02-04-85	Patterson 1985
26[b]	02-03-85	Patterson 1985
12[b]	01-16-85	Patterson 1985
	Boxelder Creek	
20	01-08-92	NWF[d]
30	01-10-92	NWF[d]
15	01-27-87	BLM files
26	12-30-86	BLM files
17	12-23-86	BLM files
11	12-16-86	BLM files
8	01-07-84	NWF[d]
31	01- -83[e]	NWF[d]
28	01-20-79	BLM files
43	02-01-78	BLM files

HISTORIC BALD EAGLE POPULATIONS AT WINTER ROOSTS
(continued)

Bald Eagles Counted[a]	Date	Source of Data
	Little Deer Creek	
14[b]	01-31-85	Patterson 1985
0[b]	01-16-85	Patterson 1985
	Pine Mountain West and East	
28	01-10-92	NWF[d]
6	01-07-84	WGFD
16	01-09-83	NWF[d]
24	1978[e]	BLM files
	Big Sulfur Springs	
15[b]	02-01-85	Patterson 1985
	North Fork Cheyenne River	
2[b]	01-31-85	Patterson 1985
2[b]	01-16-85	Patterson 1985
	Pine Ridge	
12[b]	12-17-84	Patterson 1985
	Miller Hills	
3	02-03-86	USFS
17	02-19-86	USFS
25	02-25-86	USFS
25	03-03-86	USFS
12	03-10-86	USFS
9	03-21-86	USFS

[a] Afternoon counts unless otherwise indicated.
[b] Morning aerial count.
[c] Morning count.
[d] NWF mid-winter bald eagle survey.
[e] Specific date was not recorded.

Winter roost sites are selected by bald eagles for several reasons, with the primary factor thought to be security from disturbance. Another factor is protection from wind, since roosts are located on the lee side of ridges or draws. There is some heat advantage gained from canyon habitat, where vegetation is more dense than in other nearby areas. There also seem to be behavioral reasons for eagles choosing to roost communally.

Typically, roosts are located on the north or northeast slopes of remote canyons, where mature ponderosa pine trees are located. Other species of trees, such as lodgepole pine, Rocky Mountain juniper, and Douglas fir may be associated with the ponderosa pine, but they usually are not used as roost trees. Two of the 11 roosts in the resource area, Stinking Creek and Cole Creek, are different. These roosts are in cottonwood tree zones. It is thought that these roosts are used in milder weather, and that the eagles go to the canyon roosts in harsher weather. After leaving for feeding areas in the early morning, bald and golden eagles return to the roosts each day between early afternoon and dark, with most of the eagles arriving within one hour of sunset.

Of all bald eagle habitats, the roost and nest habitats are the most sensitive to human disturbance. Observations have shown that bald eagles flying into a roost will usually, upon seeing a person, immediately turn and fly vigorously away from the roost. The bald eagles have also been observed to flush from the roost and fly vigorously away when people are seen. This has occurred when a person was in a stand of trees more than 3/4 mile from the roost.

In determining boundaries for bald eagle roosts, the previously outlined biological factors were used. At all times, roost boundaries were determined only after consultation and coordination between BLM, FWS, and WGFD. The ACEC boundary was established for the management framework plan between 1978 and 1980. Jackson Canyon and Little Red Creek, the first known roosts in this area, were located in remote canyons within a valley (Gothberg Draw) that was almost undisturbed in winter. Yet outside this undisturbed setting were areas of considerable activity.

The ACEC boundary was drawn to include the valley area the bald eagles view as they travel to and from the roosts, or while in the roosts. The intent was to provide enough buffer so that disturbance activities would not take place where the eagles could see them. It was considered that activities outside this buffer area would not impact eagles. The boundary drawn on maps used roads and trails that could be identified on the ground, rather than legal subdivisions and descriptions.

Throughout the 1980's, other roosts were discovered in the resource area. Although the same biological approach was used to draw roost boundaries for these new roosts, the focus was on buffers around specific roost sites, rather than on the valley approach used for the ACEC. In the case of the later discovered roosts, the area within view of the roost and eagles' major travel routes were included in the roost boundary. Areas topographically screened from view of the eagles, or more than 1 mile away from the roost, were left outside the buffer. These roost boundaries were drawn on maps using legal subdivision lines instead of roads or trails.

Near bald eagle roosts, BLM planning decisions provide for restrictions of land uses requiring BLM approval by way of seasonal and occupancy restrictions. On proposed actions on federal surface-federal minerals, or private surface-federal minerals, surface occupancy and surface disturbing activities are controlled by the RMP decisions. These are implemented through application of the following stipulations on land use authorizations or oil and gas leases.

Within the core of roost habitat in bald eagle roost area boundaries, the following restriction has been applied:

> "No surface development will be permitted on the following winter roosting areas for bald eagles."

When applied to oil and gas leases, either the legal description of the portion of the lease subject to this restriction is listed, or the entire lease may be subject to the restriction. On other proposals for use of federal surface, the proposed use is either relocated outside the restricted area, or the proposal may be denied. Any proposed development within this part of the roost boundary would be subject to consultation with the FWS, and coordination with the WGFD, as required by the Endangered Species Act of 1973.

Outside the core of the roost habitat, but within the perimeters of bald eagle roost area boundaries, the following restriction has been applied:

> "No surface development will be allowed from November 1 through March 31."

When applied to oil and gas leases, either the legal description of the portion of the lease subject to this restriction is listed, or the entire lease may be subject to the restriction. Usually, the restriction does not apply to maintenance and operation of producing oil and gas facilities. On other proposals for use of federal surface, construction may occur outside the restricted period, the proposal may be relocated outside the restricted area, or the proposal may be denied. Any proposed development within this part of the roost boundary could be subject to consultation with the FWS, and coordination with the WGFD, as required by the Endangered Species Act of 1973.

Before this HMP was initiated in early 1991, the total acreage of federal surface-federal minerals and private surface-federal minerals lands in roosts other than the ACEC was 39,589 acres (table 2). This acreage included the year-round no surface occupancy restriction in the core of the roost boundary, and the seasonal no surface occupancy restriction in the perimeters of the boundary for the purpose of protecting bald eagles and bald eagle habitat.

Table 2

ROOST ACREAGES SUBJECT TO
SURFACE OCCUPANCY RESTRICTIONS PRIOR TO 1991[a]

Roost Name	Pre-HMP Roost	HMP Roost	Difference
Stinking Creek	5,250	1,702	- 3,548
Cole Creek	1,070	314	- 756
Boxelder Creek	3,025	3,025	0
Little Deer Ck.	1,542	1,542	0
Pine Mountain West	4,840	3,950	- 890
Pine Mountain East	7,240	3,242	- 3,998
Big Sulfur Springs	4,660	2,940	- 1,720
North Fork Cheyenne River	4,827	2,494	- 2,333
Pine Ridge	3,561	3,801	+ 240
Miller Hills	3,574	3,414	- 160
Totals	39,589	26,424	- 13,165

[a] These acreages include federal surface-federal minerals, and private surface-federal minerals lands only. The acreages, if any, within roosts boundaries which are private surface-private minerals lands are shown in appendix E, "Surface and Mineral Ownership of Roosts."

Land uses proposed on lands subject to a seasonal occupancy restriction were almost always analyzed in consultation with FWS and coordination with WGFD, as required by the Endangered Species Act of 1973. The necessary coordination between federal and state officials often took months to complete, causing delays and uncertainty for the land use proponents. Further, application of the seasonal restriction on roost areas did not address conflicts resulting from activities being authorized during the summer, then continued during the no surface occupancy winter season. For example, if authorization was given to drill an oil and gas well during the summer, impacts to eagles from the drilling activities could be avoided. However, if that well became a producer, operation of production facilities during winter, which was allowed by the seasonal restriction, would conflict with eagles using the roosts.

During initial stages of HMP preparation, roosts buffer areas, and the types and effectiveness of restrictions, were reviewed with FWS and WGFD. Reduction of the size of the roost buffer areas to the most crucial portions, which would be subject to the year-round no surface occupancy restriction was analyzed. Under this scenario, the perimeter areas subject to seasonal no surface occpancy restrictions would be eliminated. By doing so, "what was in was in, and what was out was out." That is, lands within the roost boundary would be subject to the year-round no surface occupancy restriction for protection of bald eagles and their habitat, and lands outside the boundary would not be subject to any bald eagle seasonal or occupancy restrictions, nor would Endangered Species Act consultation be necessary.

As a result of coordination between BLM, FWS and WGFD, the bald eagle roost boundaries being considered in this HMP were determined. This HMP covers 26,424 acres of federal lands or mineral estate in bald eagle roost areas (excluding the ACEC), a reduction of 13,165 acres of federal lands or mineral estate from the acreage previously subject to bald eagle protection restrictions (table 3).

Table 3

ROOST ACREAGES USED IN ANALYSIS OF PROPOSED PUBLIC LAND USES [a]

	Previous to HMP (1991)			Considered in HMP			
Roost Name	Private Surface-Federal Minerals	Federal Surface and Minerals	Total Public Lands	Private Surface-Federal Minerals	Federal Surface and Minerals	Total Public Lands	Difference
Stinking Creek	2,590	2,660	5,250	760	942	1,702	- 3,548
Cole Creek	277	793	1,070	157	157	314	- 756
Boxelder Creek	84	2,941	3,025	2,941	84	3,025	0
Little Deer Creek	160	1,397	1,557	1,397	160	1,557	0
Pine Mountain West	2,320	2,520	4,840	1,516	2,434	3,950	- 890
Pine Mountain East	2,320	4,920	7,240	1,942	1,300	3,242	- 3,998
Big Sulfur Springs	2,712	1,948	4,660	829	2,112	2,940	- 1,720
North Fork Cheyenne River	1,946	2,881	4,827	1,153	1,347	2,500	- 2,333
Pine Ridge	921	2,640	3,561	2,840	961	3,801	+ 240
Miller Hills	1,466	2,108	3,574	1,948	1,466	3,414	- 160
Totals	14,796	24,808	39,604	15,477	10,963	26,439	- 13,165

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[a] The Jackson Canyon ACEC is not included in these figures because the ACEC boundary is always used for determining the area to be considered in assessment of proposed public land uses.

Other wildlife species that could be expected in bald eagle habitat areas include big game, upland game birds, small game mammals, other raptors, waterfowl, mammalian predators, non-game birds, and non-game mammals. Big game species include elk, mule and white-tailed deer, and pronghorn antelope. Upland game birds that may be present in bald eagle habitats are turkey, blue grouse, sage grouse, Hungarian partridge, and chukar. Cottontail rabbit are the only small game mammals known to be present. Other raptors present are the prairie falcon and northern goshawk. Black bear, mountain lion, bobcat, coyote, and fox are the mammalian predators that could be found in bald eagle habitat areas. Non-game birds that are common include sparrows, finches and jays. Mice, voles, and chipmunks are the non-game mammals that would likely be present.

Fire Management

Fire management actions in the PRRA include suppression of wildfires and prescribed fires on public lands. Full suppression is the aggressive and complete suppression of all wildfires, regardless of cause, subject to any restrictions outlined in RMP decisions. Prescribed fires are the skillful application of fire to a specified area under specific weather conditions (a prescription) to achieve an RMP management objective.

Management of wildland fires in the resource area is provided by the BLM Casper District Office, which maintains cooperative agreements for fire control with county and volunteer fire departments. The BLM Casper District has one permanent fire management officer, and employs a temporary fire crew of 10 people during the summer months. Other employees throughout the district are also trained for fire duty, providing initial attack or support assistance as needed. The district maintains three wildland fire engines for fire suppression, and through regional and interagency agreements can obtain additional equipment and personnel support when needed in addition to forces of local cooperating agencies.

Fire protection for structural developments within the resource area is provided by city or county fire departments, as appropriate to the location. BLM personnel are not trained or equipped to fight structural fires, and Bureauwide policy prohibits BLM employees from fighting structural fires.

Fuels

Fuels types in the roosts, feeding areas, and nests fall into two general categories. These are timber and grass-sagebrush, or some combination of both. Fuel loads range from heavy to light, and on most sites there are sufficient natural breaks to preclude a fire spreading within, into, or out of the areas. The habitat areas in riparian zones would not support fire except during extremely dry conditions such as prolonged drought. In some habitat areas, mountain pine beetle damage to timber stands can result in dead standing trees, which would support fire more readily than living stands.

In the Jackson Canyon ACEC, two-storied stands of trees would support fire more readily than one-storied stands. Two-storied stands provide a continuous chain of fuel from the ground to the crowns of trees. In one-storied stands this type of fuel is less available. Where mountain pine beetle activity has killed trees, even in one-storied stands, fuel would be more available than in healthy timber.

A fuel loading inventory to measure the weight (tons or pounds) of fuel per acre that could burn has not been completed, and one is not planned for any of the bald eagle habitat areas.

Fire Behavior

Natural fuel breaks are present in all of the areas, and these usually provide sufficient barriers against the spread of fires. In most cases, lightning-caused fires will spread through fine ground fuels (grasses) into heavier fuels (timber or brush) when started. The behavior of man-caused fires is generally the same. Fires will most often be ground fires, with occasional torching (a single tree burning at the top) and crowning (fire spreading through the tops of trees). There are no areas where the density and size of the trees result in complete crown closure of a sufficient area to support large uncontrollable crown fires. However, fire spread in the habitat areas will be largely dependent on wind.

Jurisdiction and Access

The BLM is responsible for suppression of wildland fires on public land; the counties are responsible for wildland fires on private and state lands. All the areas have intermingled federal, state, and private ownership, and physical and legal access is either limited or nonexistent. In most cases, roads or trails are present which would allow at least limited movement of fire equipment to and within the areas.

Operations

Under present management, all fires occurring in or threatening eagle roosts, feeding areas, or nests are to be fully suppressed. Depending on several factors, initial attack on fires in these areas would be by BLM, county, or United States Forest Service (USFS) forces (by agreement, USFS acts as BLM's agent in certain areas), or a combination of all these forces.

In the last 10 years fires have occurred on an infrequent basis--not in all areas, and not every year. There have been three large fires (100 acres or more) in or threatening the roost areas. The Red Creek fire in 1985 burned 852 acres in Little Red Creek Canyon; the Sherwood fire in 1980 burned 1,500 acres on Pine Ridge; and, the Avery Draw fire in 1988 burned 380 acres on Pine Ridge. Table 4 lists known fire history in the bald eagle habitat areas.

Table 4

FIRE HISTORY

Bald Eagle Roosts, Feeding Areas, and Nests

Habitat Area (Name)	Fire Name or Type	Year	Acreage
Jackson Canyon ACEC	Red Creek	1985	852
	Other Small Fires	1991	less than 1
	Prescribed Burns	1987	290
Stinking Creek	None Known On BLM	—	---
Cole Creek	Repeated Railroad Fires		
	Most Recent	1990	---
Boxelder Creek	None Known On BLM (Large fire in 1890's)	--	---
Little Deer Creek	None Known On BLM	—	---
Pine Mountain West	None Known On BLM	—	---
Pine Mountain East	Bill's Fire	1988	60
Big Sulphur Springs	None Known On BLM	—	---
N. Fork Cheyenne River	None Known On BLM	—	---
Pine Ridge	Sherwood	1980	1500
	Avery Draw	1988	350
Miller Hills	None Known On BLM	—	---

In the recent past, smaller fires have occurred on Pine Mountain, Pine Ridge, Boxelder Creek, and Cole Creek. Lightning has caused most fires, with a higher occurrence of railroad-caused fires in the Cole Creek area.

These fires were suppressed using a combination of force types, primarily engine and hand crews, but also dozers, helicopters, and aerial retardants. Resource advisors are requested for all fires, and especially all fires threatening bald eagle habitat areas. Fire crews are limited in suppression efforts by RMP restrictions against falling known roost trees. It is generally not preferred to use dozers for line construction, although their use is not prohibited. When dozers are used, an archeologist must perform an inventory of the area prior to surface disturbance. Dozer and hand lines are reclaimed to the point of preventing, or retarding erosion, primarily by water barring.

Prescribed fire use has been employed in the Jackson Canyon ACEC on several occasions over the last five to ten years. Prescribed burning was used for direct control of mountain pine beetle and sagebrush, and for wildlife habitat improvement (to open up stands of juniper).

Soils and Vegetative Types

The soils found in the separate roost areas are quite varied, and it is not practical to describe in detail all of individual soil mapping units that are present. Complete descriptions for these soils can be found in the Classification And Correlation Of The Soils Of The Natrona County Area, Wyoming (USDA, SCS 1986) and the Soil Survey of Converse County, Wyoming, Northern Part (USDA, SCS 1983). Copies of these publications can be found in either the Natrona County or Converse County Soil Conservation Service (SCS) district offices or at the BLM, PRRA office.

A soil survey has not been completed for the southern half of Converse County, and there is no soil information available for the Boxelder Creek, Little Deer Creek, and Cole Creek roost areas.

Many different kinds of plant communities exist in each roost area. These can be broken down into broad vegetative types as well as into individual communities referred to as range sites. The soil surveys identify the range sites that are typically found on the individual soils. The descriptions for the various range sites can be found in technical guides prepared by the SCS, and copies of these can be found in the respective SCS or BLM offices. The roost areas fall in five separate major land resource areas (MLRAs). These are the 5- to 10-inch precipitation zone, Wind River (WR) MLRA; the 10- to 14-inch precipitation zone, High Plains Southeast (HPSE) MLRA; the 10- to 14-inch precipitation zone, Northern Plains (NP) MLRA; the 15- to 19-inch precipitation zone, Foothills and Mountains Southeast (FMSE) MLRA; and the 15-to 19-inch precipitation zone, NP MLRA.

No known threatened or endangered plant species are known to exist in any of these roost areas.

Visual Resources

Visual resource management (VRM) is the planning, design, and implementation of management objectives for maintaining scenic values and visual quality. The system is based on research that has produced ways of assessing aesthetic qualities of the landscape in objective terms. After inventory and evaluation, lands are given relative visual ratings (management classes), which determine the amount of modification allowed to the basic elements of the landscape.

There are five VRM classifications. Class I is the most limiting management classification, applying to lands such as wilderness areas and wild and scenic rivers. Created contrasts must not attract attention. Class II allows changes in any of the basic elements if the created contrast is not evident in the characteristic landscape. Contrasts are seen but must not attract attention. Under Class III, contrasts to the basic elements are evident but should remain subordinate to the existing landscape. Under Class IV, any contrast attracts attention and is a dominant feature of the landscape in terms of scale, but it should repeat the form, line, color, and texture of the characteristic landscape.

The Class V classification is applied to areas where the natural character of the landscape has been disturbed to the point where rehabilitation is needed to bring it up to one of the four other classifications. This classification also applies to areas where there is potential to increase the landscape's visual quality. More information on the visual resource rating system can be found in the PRRA RMP.

The characteristic natural landscape in the PRRA varies from forested mountains to rolling plains. There are also areas that have been altered by the development of coal mines, mineral material extraction, oil and gas fields, and increased urban development. Except for the North Platte River and associated reservoirs, water is not a dominant feature.

Lands in all bald eagle habitat areas fall within VRM classes III and IV. The VRM system is applied on a case-by-case basis where required to mitigate impacts from surface development. In the Jackson Canyon ACEC and other roosts, and at bald eagle nests, any proposed surface development on public lands would be subject to a VRM rating system analysis, as required by RMP decisions.

Land Use Capability

The BLM anticipates that existing land uses will continue in most of these areas without any substantial change in the types or intensities of use. The Jackson Canyon ACEC, and the potential oil and gas development areas are the exceptions. Where developments or improvements are present, necessary operation and maintenance of such facilities will be ongoing. These situations may include producing oil and gas leases where access to and maintenance of these facilities is needed to continue production. The same is true of existing rights-of-way such as pipelines and power lines. Operation and maintenance will continue on these facilities when and as needed.

Most of the land under consideration is suited to livestock grazing. This has been a historic use and is expected to continue. In most cases there are range improvements constructed to support livestock use. These may include wells, stock ponds, water tanks and troughs, pipelines, and fences. All generally need maintenance at one time or another.

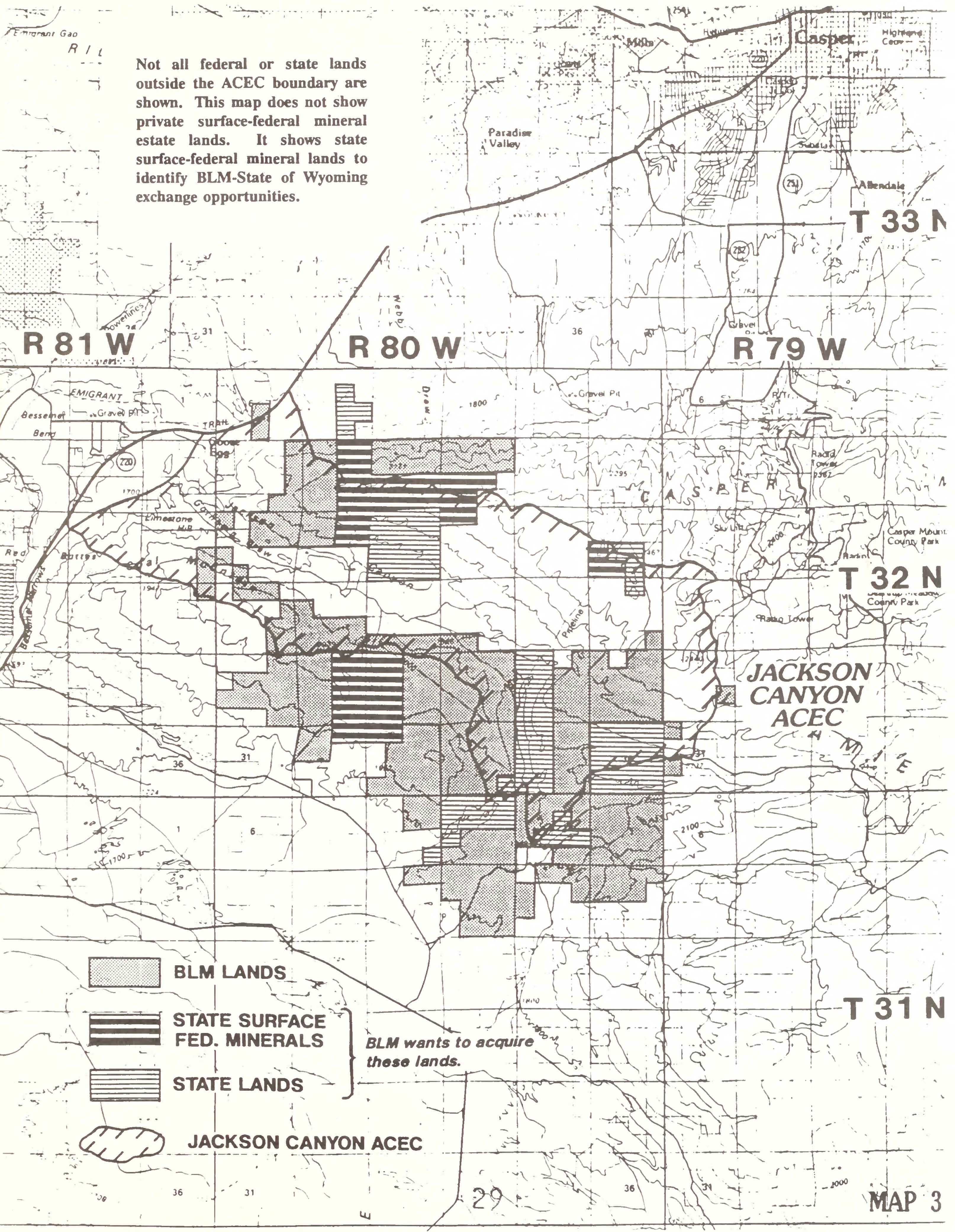
JACKSON CANYON ACEC

General Setting

The Jackson Canyon ACEC is in south-central Natrona County at the western end of Casper Mountain, approximately 9 miles southwest of Casper, Wyoming (map 3). The ACEC occupies portions of T. 31 N., R. 80 W.; T. 32 N., R. 79 W.; T. 32 N., R. 80 W.; and T. 32 N., R. 81 W.

It is bounded on the north by Wyoming Highway 220 and the spine of Casper Mountain, on the east by a line drawn roughly southward from Camp Sacajawea to Circle Drive, on the south by Circle Drive, and on the southwest and west by the spine of Coal Mountain.

The Jackson Canyon area is typical of mountainous topography, with steep, partially wooded slopes, escarpments, and deeply incised drainages and canyons. The ACEC is drained by two major drainages, Jackson Canyon and Little Red Creek.


Not all federal or state lands outside the ACEC boundary are shown. This map does not show private surface-federal mineral estate lands. It shows state surface-federal mineral lands to identify BLM-State of Wyoming exchange opportunities.

MAP 3

Jackson Canyon drains roughly two-thirds of the area, collecting water from the south side of Casper Mountain and the north side of Coal Mountain and depositing it into the North Platte River. Little Red Creek drains the southeast portion of the ACEC and collects most of its water from the south slopes of Casper Mountain. Little Red Creek drains southward into Bates Creek which in turn flows into the North Platte River.

Elevations range from 8,005 feet above sea level at the eastern end of the area to 5,300 feet at the western end. This is a difference of 2,705 feet in elevation across the existing ACEC.

Land Status

Federal lands in the Jackson Canyon ACEC are generally in large blocks, intermingled with equally large state and private land blocks. A few smaller, isolated federal land parcels are present in the area, and one smaller state land parcel is partially within the area at the southern edge.

Several land parcels within the ACEC have been leased or patented under the Recreation and Public Purposes (R&PP) Act. These lands are segregated from operation of the mining laws and remain closed to filing of mining claims until the lease is cancelled or title reverts to the U.S., and the segregation is removed. All of these parcels also preclude occupancy of the surface for oil and gas drilling, although leasing can continue. These lands also remain subject to the provisions of the R&PP Act. Those provisions require the lands to be managed in accordance with a plan of management and development, and any change in plans or uses in addition to those authorized in the plan must have BLM approval. This is true whether the land is leased or patented.

Most of the private land within the ACEC is subject to conservation easements held by the Nature Conservancy. Although each easement from each individual landowner is unique, the general concept enumerated is preservation of the natural resources in a natural state, and limitations on development of the lands so as to preserve them in support of bald eagle habitat.

Most of the state lands in the ACEC area are designated as a rare and uncommon area by the Wyoming Environmental Quality Council. Though the designation carries no legal effect, it does indicate the resource significance in the area.

The archery range was patented under the R&PP Act to Natrona County in 1968, and continues to be used for this purpose. The Calvary Baptist Church camp was also patented in 1968 under the same act. This site has never been developed and is subject to reversion of title to the U.S. under the terms of the act. One other parcel was patented in 1963 to the Wyoming Girl Scouts. This land is an addition to Camp Sacajewea. It lies immediately south of the camp, and adjacent to the ACEC boundary on the east. A 40-acre parcel of land is currently leased under the R&PP Act to the Casper College Foundation for use as an outdoor education area. The lease was issued in 1980 for a 20-year period.

Access

The Jackson Canyon ACEC area is accessible via several routes. Most notable are the Casper Mountain Road (Wyoming Highway 251) to the Micro Road (Natrona County Road 504) and the Archery Range Road; Medicine Bow Highway (Wyoming Highway 487) to the Circle Drive Road (Natrona County Road 506); and, Alcova Highway (Wyoming Highway 220) to the Gothberg Draw Road. Each of these routes would also involve access across other unnamed roads or trails. Very few of these existing roads and trails provide legal access. As noted in the planning decisions, control over access and road development is a major federal land management issue for this area. In particular, the Archery Range Road is not a legal public access route, and does not provide legal access to the archery range.

Land Uses and Recreation Resources

The Jackson Canyon ACEC is the roost with the greatest diversity of land uses. Among the recreational uses are snowmobiling, cross-country skiing, sightseeing, photography, hiking, camping, archery, spelunking, and hunting. Several camps are present on the mountain, including the Girl Scout's Camp Sacajewea near the east edge of the ACEC. The Girl Scouts also hold two leases (WYW61537 and WYW62941) under the R&PP Act for about 20 acres east of Camp Sacajewea, and just outside of the ACEC. The Calvary Baptist Church holds 80 acres within the ACEC for a camp, but no development has occurred. The archery range is partially within the ACEC and includes a small camping area in addition to the developments for archery practice. Snowmobiling and cross-country skiing are other uses being made of the archery range, and are authorized under the R&PP plan of development for the park. Casper College Foundation's 40-acre lease on federal land is immediately adjacent to the east border of the ACEC.

There has been some winter off-road (ORV) travel (snowmobiles and all-terrain vehicles) during the past ten years within the ACEC in violation of the seasonal closure. This has been reported to BLM by landowners in and near the ACEC, and vehicle tracks have been observed by BLM during winter in the ACEC. However, use was fairly light during most winters when snow accumulation was low. Further, closed gates on most access trails and a buck-and-rail barrier on another trail have discouraged winter access. During the 1990-91 winter vehicle use occurred in the valley within ½ mile of the Jackson Canyon roost.

There are no written restrictions on pedestrian uses such as hiking, skiing, camping, and hunting during winter. Closed gates and buck-and-rail barrier probably discourage winter pedestrian access.

Elk seasons in this area (hunt area 19) run from November 1 through November 20. Most other hunting takes place before the November 1 seasonal closure of roads. Blue and ruffed grouse hunting, which could take place until November 30, is usually done on foot. Although there is some opportunity for hunters to get to the roosts on foot, it is unlikely that hunters would attempt it. Chukars and gray (Hungarian) partridge populations in the ACEC are small, so hunting would probably not occur, especially after the area is closed to vehicles. No information is available to indicate that hunting or trapping of nongame wildlife and furbearers takes place during winter in the ACEC.

Since there are no restrictions on summer recreational use, there is good opportunity for people to get to the roosts in summer. In the Little Red Creek area recreation increased an estimated two to three times over previous levels during 1983 to 1985 due to a timber thinning and fuelwood permitting program. A large number of trails were developed by individuals attempting to drive through the fuelwood sale areas. The permittees became familiar with the area and returned driving ORVs, hunting, and possibly even skiing.

Residential development for summer and year-round cabin sites is extensive on top of Casper Mountain. Many cabin sites adjoin the east and northeastern boundary of the ACEC. A few cabins on private land are also present within the ACEC area.

Though no active mining or other mineral development is occurring in the ACEC, a small feldspar mine operates near the Girl Scout camp within ½ mile of the ACEC boundary. Oil and gas leases subject to no surface occupancy stipulations are present over much of the area, and mining claims have been staked within the ACEC. Limestone quarrying on a small scale occurred more than 20 years ago on private lands in the northern portion of the area (Cole 1990). Bentonite mining was conducted on several areas along Coal Mountain Road, within 2 to 3 miles of the ACEC, but was discontinued. The area has since been reclaimed.

Some timber harvesting has occurred. There has also been a limited amount of timber stand management in response to recent fires and mountain pine beetle infestation in the area. There was a wildfire in July 1985 in the Little Red Creek area, but the cause was not identified.

A few rights-of-way are present in the ACEC, but the only one of concern is a hydrocarbon products pipeline operated by Conoco, Inc. This line extends from Casper southwesterly to Sinclair, Wyoming and was responsible for a recent gas spill into the North Platte River. The pipeline traverses the ACEC on state and private lands, and it was recently reconstructed through most of this area in response to the spill. Of concern is maintenance of the pipeline during the critical winter season. This type of maintenance could be rescheduled by the company to avoid critical seasons. In the event of a rupture, necessary repairs could not be delayed or rescheduled, and may need to be undertaken during the roosting period.

Wildlife Resources

The two roosts in the ACEC, Jackson Canyon and Little Red Creek, were the first bald eagle roosts discovered in eastern Wyoming. They were identified when 25 poisoned eagles were found in the canyons in 1971. To date, the highest count of bald eagles using the Jackson Canyon roost was 62, and the highest at Little Red Creek roost was 25 (table 1).

Big horn sheep have been seen in the ACEC during the past two years. Apparently, these sheep are part of the Laramie Peak herd. Near Circle Drive and the western portion along Goose Creek are mule deer crucial winter range. Three raptor nests have been identified in the ACEC; two are golden eagle nests and one has been occupied by Cooper's hawks. Other wildlife species that could be found in the ACEC include upland game birds, small game mammals, non-game birds, and non-game mammals.

Geologic Setting

The Jackson Canyon ACEC study area is on the western end of Casper Mountain. Casper Mountain is an east-west trending, asymmetric, doubly plunging anticline, approximately 4 miles wide and 16 miles long. The strata on the south flank of the mountain dip southward and those on the north flank dip northward. The north flank of Casper Mountain is cut by a major east-west trending, high angle reserve fault known as the Casper Mountain Fault. This fault has a maximum stratigraphic displacement of 5,000 feet (Schwarberg 1959).

The ACEC is in the plunge area of the Casper Mountain anticline. In addition, the western end of the ACEC is located in the area where the east-west trending Casper Mountain anticline abuts the northwest trending Emigrant Gap anticline. As a result, the geologic structure of the area is complex, especially the northwestern end of the ACEC boundary in the vicinity of Goose Egg Inn.

Due to the geologic structure of the area, many formations crop out on the surface of the study area. They are listed on table 5 in order from youngest to oldest.

Table 5
Geologic Formations in the ACEC

Geologic Time Period	Formation
Lower Cretaceous	Cloverly
Lower Cretaceous	Lakota
Upper Jurassic	Morrison
Upper Jurassic	Sundance
Triassic	Jelm - Chugwater Group
Triassic	Alcova - Chugwater Group
Triassic	Red Peak - Chugwater Group
Triassic	Goose Egg
Permian	Casper (Tensleep)
Mississippian	Madison
Cambrian	Flathead
Precambrain	Granite

Mineral Resources

Mining claim records dated February 19, 1991 were checked for the existence of mining claims within the ACEC. There are nine recorded mining claims within the ACEC located in T. 32 N., R. 79 W., section 18, SE¼ (six claims), section 19, all (three claims).

Although locatable mineral occurrence within the boundaries of the ACEC is undocumented, several mineral-related developments exist just outside the ACEC boundary. As an example, the Eadsville area is the best known historic mining development on the mountain.

Eadsville was a small community located in the NW¼, section 19, T. 32 N., R. 79 W., which sprang up in the 1880s in response to rumors of a discovery of silver. Although silver ore was never mined, several wagonloads of copper ore were mined in the Eadsville area.

In addition, a feldspar quarry is located less than ½ mile east of the eastern boundary of the ACEC in the SW¼, section 17, T. 32 N., R. 79 W. The quarry is a small operation and is worked only on a periodic basis.

Although the potential for locatable minerals within the study area is unknown, it is assumed that it would be at least as great as the area outside the ACEC boundary. This is due to similar geologic environments immediately inside and outside the ACEC boundary.

There are no known active mineral leases, sales, or permits within the area. The potential for salable minerals, such as sand, gravel, and aggregate material (limestone) is high. This is due to the presence of the Alcova Limestone which crops out along the southeastern margin of the ACEC boundary. The Alcova Limestone is a cliff-former due to its erosion-resistant nature. It is approximately 10 feet thick, and forms a large dip slope in sections 27, 28 and 34, T. 32 N., R. 80 W. at the southwestern boundary of the ACEC. The Alcova Limestone dips to the southwest at 8° to 10° and covers a large portion of the surface of the aforementioned sections.

Due to the abundance of the limestone material in this area, the relatively good mining conditions, the proximity to Casper, and the good quality of the material, this Alcova Limestone is highly sought after. Although the Alcova Limestone is generally barren of fossils, E.C. Case discovered an important vertebrate fossil in the Alcova in 1936. The fossil, a nothosaur Corosaurus alcovensis, was the first of its kind discovered in North America and is to-date the best preserved. The specimen, according to University of Wyoming records, was discovered in a limestone quarry along the old Casper to Medicine Bow highway near the mouth of Jackson Canyon (section 12, T. 32 N., R. 81 W.).

Since the discovery, only a small number of additional partial remains have been discovered, and all were from the same general area. According to Storrs (1991), Corosaurus was the first, and remains the only, western hemisphere nothosaur. It was one of the most primitive of its kind and gives insight into plesiosaur evolution. Corosaurus remains are not extremely abundant in the area, but they are not rare (Storrs 1991).

Overall, oil and gas potential within most of the ACEC boundary is probably low; however, according to Burford (1986), geologic structures in the northwest end of the ACEC (or plunge area of Casper Mountain anticline) may provide some potential for entrapment of hydrocarbons.

Rangeland Resources

The public land in this area is located in one grazing allotment, Eagle Ridge (10142). The type of use for this allotment is cattle and most of the use in this area is seasonal and occurs between April and October. Within the ACEC, Eagle Ridge Ranch leases approximately 1,160 acres of state land for grazing, which includes sources of livestock water. The lessee has verbally indicated that livestock management on the private, state and federal lands relies on three natural water sources on state land and two on private land in or near the ACEC. These water sources are used to disperse livestock over the allotment. The lessee has stated that the water sources on state land represent a $90,000 value to ranch operations.

Eagle Ridge Ranch has applied for a range improvement permit to construct a fence on public land. They also are interested in burning sagebrush, most of which is on private and state land, with some located on public land. The previous lessee of public lands in the Little Red Creek area had applied to BLM for a permit to develop a spring outside the ACEC for livestock use. Since acquiring the grazing lease for these public lands, the Eagle Ridge Ranch has not indicated if development of this water source will be pursued. There are no other known range improvement projects being planned on public land at this time.

Existing range improvements on public lands include fences, reservoirs, water wells, and some spring developments.

Soils and Vegetative Types

There are at least 15 separate soil mapping units found in the Jackson Canyon ACEC (appendix I). The five major soil units include: the Redsun-Rock outcrop complex on 15 to 30% slopes; the Castner-Chincap-Rock outcrop complex on 6 to 40% slopes; Chittum-Sneffels loam on 5 to 40% slopes; Nunnston loam on 2 to 15% slopes; and the Threetop-Sunup-Frontier complex on 3 to 20% slopes. The soils in Jackson Canyon are in the Castner-Chincap-Rock outcrop complex.

Most of the soils in this area were formed in residuum or in slope wash alluvium derived from red siltstone or sandstone. Some soils are derived from shales. The soils range from very shallow to very deep and are generally of loamy texture. The hazard from water erosion for the major soils ranges from moderate to high.

This area consists of sagebrush-grass, tree-grass, and woodland vegetative types. Range sites are in the 10- to 14-inch HPSE and 15- to 19-inch FMSE MLRAs. The principle range sites include loamy, shallow loamy, shallow breaks, and very shallow in the 10- to 14-inch HPSE MLRA; and, loamy and shallow loamy in the 15- to 19-inch FMSE MLRA. Ponderosa pine is the dominant tree in the area. Some limber pine, Douglas fir, Rocky Mountain juniper and aspen can also be found here. Lodgepole pine can be found at the higher elevations on the east side of the area. Big sagebrush is the major shrub, and the grasses include rhizomatous and bluebunch wheatgrass, needlegrass, bluegrass, junegrass, Idaho fescue and sedges.

Ponderosa pine is the dominant tree in the Little Red Creek area. Scattered amongst the ponderosa pine are small patches of aspen. Stands of trees vary and consist of either two-storied stands of ponderosa pine or one-storied stands of ponderosa pine and Douglas fir trees.

The two-storied stands of ponderosa pine consist of a dominant, over-mature age class of trees 200 years old or older, and a co-dominant mature and immature age class of trees 100 years old or less. The one-storied stands of ponderosa pine and Douglas fir trees consist of co-dominant mature and immature ponderosa pine and Douglas fir, with an average age of 105 and 90 years, respectively.

The mature ponderosa pines average from 70 to 90 feet high, and the immature ponderosa pines average from of 55 to 70 feet high. The mature Douglas fir trees average from 60 to 65 feet high, and the immature Douglas fir trees average around 45 feet high.

Mountain pine beetle activity is present in most stands. However, mortality varies, and ranges from light to relatively high.

Land Use Capability

Given current BLM planning decisions, landownership patterns, and existing land uses and developments, the BLM anticipates that many of the existing uses will continue in much the same manner and at the same level of activity as at present.

One land use opportunity is acquisition of, or providing legal access to, the archery range. Legal public access to this land has never been obtained by Natrona County, but it is needed to secure and protect current and future rights of ingress to and use of the area. The main issue is in regard to the width of easement needed to build a road adequate for current and future use of the area. Generally speaking, a 50-foot easement width would be sufficient to build a crowned and ditched road with an 18-foot subgrade width and necessary drainage ditches. This is the BLM minimum road standard, though a lesser or greater standard could be designed. Such a roadway would provide the necessary legal and physical access to the archery range. However, securing access across intervening private lands, short of condemnation, may require negotiating for a 60-foot easement. Private landowners may not be willing to give an easement less than 60 feet wide. In addition to providing access to the archery range, a 60-foot easement would allow for future residential subdivision on those intervening private lands, and on private lands in or adjacent to the ACEC. A 50-foot roadway does not meet the county standards for subdivision access, and thus would not accommodate subdivision of private lands. Without subdivision opportunity, the intervening landowners may be unwilling to grant the necessary easement for legal access into the archery range.

Limestone extraction is another potential land use opportunity within the ACEC area. An estimated 15,000,000 cubic yards of federally owned limestone are present on federal land within or next to the southwestern boundary of the ACEC. The 80 acres located in T. 32 N., R. 80 W., section 34, N½SE¼, could support a limestone quarry for 20 years (appendix J). This material could be used as a source of aggregate for road and other construction needs.

Timber harvesting is a resource development opportunity that has been identified and pursued to one extent or another in BLM land use plans. Before 1980, an estimated volume of 9 million board feet (mmbf) of merchantable timber on 1,373 acres in the ACEC was included in BLM's commercial base. Only timber stands in the Little Red Creek area were accessible and well-stocked; these contained 90% of the total volume. During the early 1980s, some of this volume was harvested, then most of the remainder was destroyed by the 1985 wildfire. Only about 20 acres of accessible, well-stocked timber remains available in the Little Red Creek area of the ACEC. The stands in the Jackson Canyon and Coal Mountain portions of the ACEC are inaccessible, and have poor- to medium-stocked merchantable timber. Therefore, the opportunity for commercial harvest of timber from public land in the ACEC will remain very low for at least the next 80 years.

Opportunities for additional recreation uses include trail construction and grooming for expanded cross-country skiing and snowmobiling. Other opportunities could include development of roads, hiking trails, campgrounds, restroom facilities, and picnic facilities. A host of other nonintensive or nonconsumptive recreational uses are possible.

STINKING CREEK ROOST

General Setting

The Stinking Creek roost is located in southeastern Natrona County, approximately 29 miles south of Casper, Wyoming, in an area known as Bates Hole. The roost area occupies portions of sections 4, 5, 6, 7, 8, and 9 of T. 30 N., R. 80 W. Map 4 shows this roost area.

The roost is in a riparian area bordered by rolling hills and incised ephemeral streams and drainages. Elevations in the roost area range from 5,900 feet above sea level to 5,710 feet above sea level. The area is drained by Stinking Creek, which in this locality is an ephemeral stream draining into Bates Creek, which in turn flows into the North Platte River.

Land Status

Federal lands in this roost area are in three parcels, and are fairly well-blocked with other federal lands. On one parcel, only 40 acres of federal land is within the roost area, although it is part of a very large block. This 40-acre piece is withdrawn as part of the Bates Hole stock driveway and is segregated by the withdrawal from disposal of the surface estate. State and private lands within the roost area are also well-blocked and comprise approximately equal acreages with that of federal lands.

Access

Wyoming Highway 487 (Medicine Bow Highway) extends along the eastern edge of, and provides legal access to, the Stinking Creek roost area. The Bates Hole stock trail (Natrona County Road 403) passes west and south of the area but does not provide legal public access into the area. Only one trail extends through the area. It runs north-south and passes near the roost, but it has no connection to a legal access point. Another trail east of the highway runs along and within the boundary of the roost area. Although legal access to the area is available, legal access through the area is limited by a lack of roads off the highway or county road, and by the presence of intervening private lands. Stinking Creek's steep and severely eroded banks are physical barriers to vehicle access other than over the existing trail.

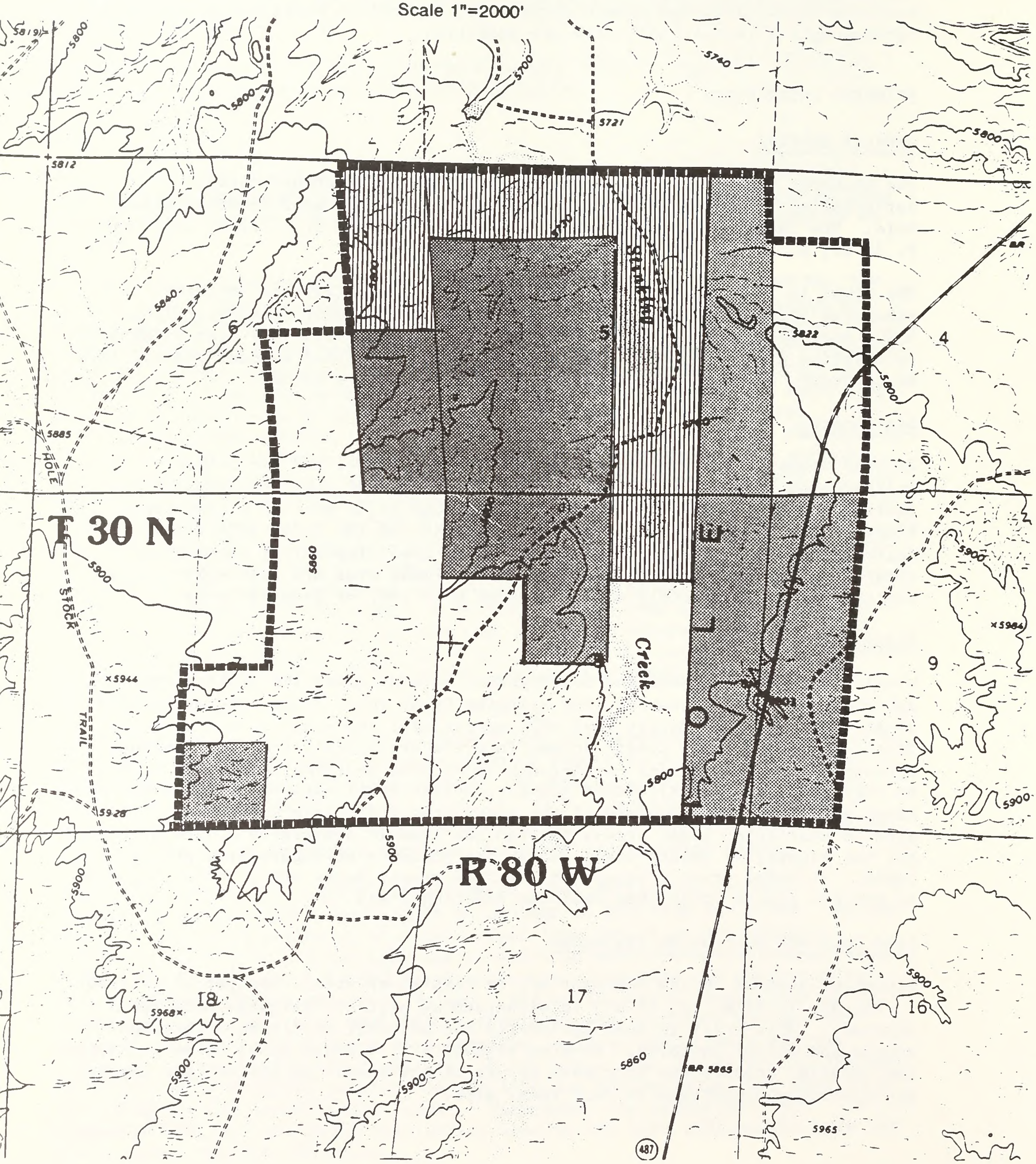
Land Uses and Recreation Resources

Livestock grazing is the dominant use in this roost area. One parcel (section 7, lot 21, T. 38 N., R. 87 W.) is withdrawn as part of the Bates Hole stock driveway. This trail is used seasonally for movement of livestock between summer and winter pastures. Wyoming Highway 487, a major route between Casper and Laramie, crosses the southeast corner of the area. No oil and gas leases are currently authorized in this roost area.

MAP 4

STINKING CREEK ROOST

Scale 1"=2000'



☐ PRIVATE SURFACE

▨ BLM ADMINISTERED LANDS

▥ STATE LANDS

Wildlife Resources

This roost is in a narrow cottonwood riparian zone with deciduous stands of trees present. Wildlife species present would include mule and white-tailed deer, pronghorn antelope, turkey, sage grouse, chukar, cottontail rabbit, red-tailed hawk, Swainson's hawk, ferruginous hawk, bobcat, coyote, and fox.

Stinking Creek has only seasonal flow, so the presence of wildlife would be limited at times by the lack of water. The aquatic animals normally associated with streams, such as beaver and muskrats, would move through the area but would not be able to stay throughout the year.

The Stinking Creek roost area contains a sage grouse lek and nesting areas for two other nearby sage grouse leks. Sage grouse leks are used by grouse during breeding (strutting) activities from early February through early May yearly. Nesting activity occurs from early April through mid-June. White-tailed prairie dogs occupy the northeast portion of the roost area. The presence of prairie dogs indicates that the area has potential as black-footed ferret habitat. The roost area is also within crucial winter range for pronghorn antelope.

Geologic Setting

The Stinking Creek roost is in Bates Hole, which according to Lageson (1980), is a topographic depression at the north end of the Shirley Basin carved from Tertiary and Cretaceous strata by Stinking Creek. The geologic formations present at the surface within the roost area include the recent alluvium of Stinking Creek and the Cretaceous Steele and Niobrara formations. There are no major structural geologic features such as faulting present in the roost area. The most significant structural feature is that Bates Hole is located between two major depositional basins, the Wind River Basin and Shirley Basin.

Mineral Resources

Mining claim records dated February 19, 1991 were checked, and there are no active mining claims recorded within the roost area.

There is no documented locatable mineral resource within the roost area; however, there may be some low potential for the occurrence of bentonite. This is possible because the Steele Shale Formation contains bentonite beds and is one of the surface formations located in the roost area.

There are no active permits or contracts for sales of mineral materials within the roost area. There is, however, moderate potential for the presence of sand and gravel within the alluvial deposits of Stinking Creek.

Although there may be some potential for oil and gas in the general area, the potential within the roost area is low. The area was tested for oil and gas potential in November 1981, when the Chamber Federal 13-7 well was drilled by the Anderson Oil Company. The well, located in the NW¼SW¼, section 7, T. 30 N., R. 80 W., was drilled to a total depth of 3,543 feet and was a dry hole. The deepest formation tested was the Tensleep Formation of Permian age.

Rangeland Resources

The public land in this area is located in two grazing allotments, as well as the Bates Hole Stock Trail. The Schnoor allotment (00140) contains more than 50% of the public land in this roost. The Garrett allotment (10032) and the stock trail contain the rest. The type of use in these allotments is cattle, and licensed use is yearlong. Cattle and sheep are trailed on the stock driveway in the spring and fall.

The grazing lessee for the Schnoor allotment is interested in having a water well drilled on public land. However, it may not fall within the boundaries of the roost area. This is the only range improvement project being considered on public land at this time in this area. Existing range improvements include fences and reservoirs.

Soils and Vegetative Types

Most of the soils in this area were formed in stratified alluvium from shales or sedimentary rock. The soils along Stinking Creek are generally deep and well-drained loamy soils. The soils of the uplands are shallow to moderately deep loam, clay loam, and shale soils. The hazard of water erosion is slight for soils along the creek and moderate to high for the soils of the uplands.

The major soil mapping units include the Haverdad-Clarkelen complex, 0 to 3% slopes; the Arvada, overflow-slickspots complex, 0 to 3% slopes; the Theedle-Shingle-Kishona complex, 6 to 40% slopes; and Zigweid Theedle loams, 3 to 15% slopes. Other mapping units found in this area are the Petrie clay loam and the Lolite dry-Rock complex (appendix I).

This area consists primarily of a shrub-grass vegetative type. The principle shrubs are big sagebrush, greasewood, and saltbush. Cottonwoods, willows, rabbitbrush, and various other shrubs can be found along the creek. The grasses include rhizomatous wheatgrass, needle-and-threadgrass, bluegrass, junegrass, and many other species.

The range sites found along Stinking Creek can be described as loamy, loamy overflow, saline lowland, and saline subirrigated type sites in the 10- to 14-inch HPSE MLRA. The plant communities found on the uplands can be described as loamy, saline upland, impervious clay, and shale range sites in either the 5- to 9-inch WR MLRA or the 10- to 14-inch HPSE MLRA.

Land Use Capability

Future land uses in this area are likely to remain the same, with livestock grazing the dominant use. No active land use prospects have been proposed, and none are anticipated.

COLE CREEK ROOST

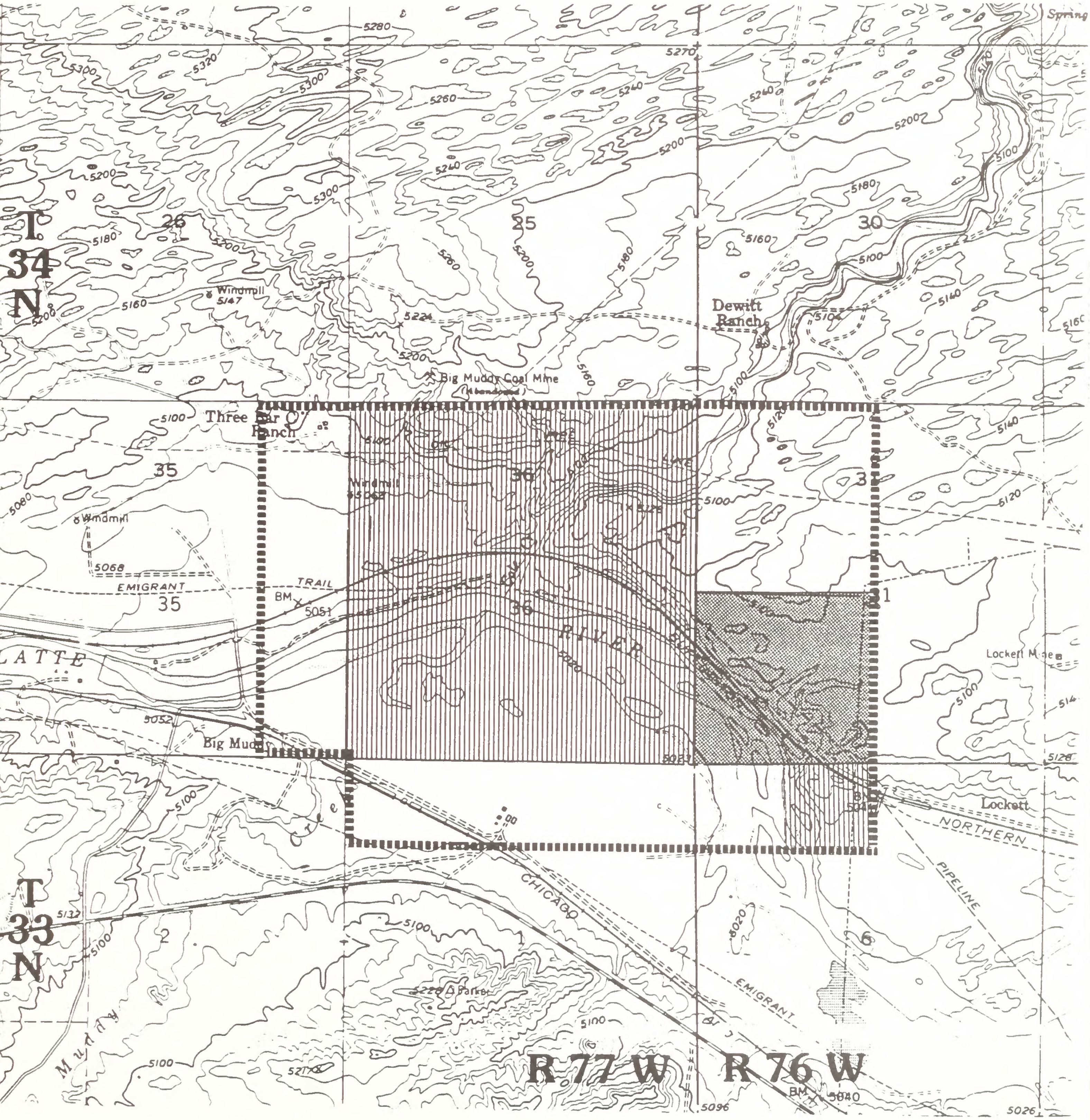
General Setting

The Cole Creek roost is on the southwestern edge of Converse County, approximately 15 miles east of Casper. The roost area occupies portions of section 6, T. 33 N., R. 76 W.; section 1, T. 33 N., R. 77 W.; section 31, T. 34 N., R. 76 W.; and sections 35 and 36, T. 34 N., R. 77 W. Map 5 shows the Cole Creek roost area.

MAP 5

COLE CREEK ROOST

Scale 1"=2000'



☐ PRIVATE SURFACE

▨ BLM ADMINISTERED LANDS

▥ STATE LANDS

The roost is within the alluvial floodplain of the North Platte River. As such, it is a riparian area, but it also includes a small portion of the drier rolling uplands and stabilized sand dunes typical of this part of the Powder River Basin. The area is drained by the North Platte River which runs eastward through the roost, and eventually drains into the Missouri River.

Elevations across the roost area range from approximately 5,128 feet above sea level to approximately 5,020 feet above sea level for a difference of 108 feet.

Land Status

Much of the surface estate in the Cole Creek roost area is state or private land, with only two small federal land parcels. Most of these lands are within a coal classification created by Secretarial Order dated October 10, 1906. The classification is an indication of coal potential, but it has no effect on land status other than for coal leasing. Portions of this roost are also in the Powder River Basin known coal leasing area.

Access

Access to the Cole Creek roost area is available from U.S. Highway 20-26 (old Glenrock Highway). Several roads and trails extend from the highway and traverse the area. Many are associated with oil and gas production in the Big Muddy Oil Field. Limitations on vehicle access are presented by the North Platte River, Cole Creek (a tributary to the river), and the Burlington Northern railroad line. Very sandy soils north of the river, private landownership in the area, and some irrigated fields are also present and limit access. In the RMP, BLM identified a proposed access easement to the SW¼ of section 31, T. 34 N., R., 77 W., which would provide legal public access to the river.

Land Uses and Recreation Resources

The North Platte River is the dominant and somewhat central land feature in the Cole Creek roost area. The roost is located immediately adjacent to the river. Several transportation facilities are present in this roost area. U.S. Highway 20-26 passes through the southwest corner of the area, as does the now-abandoned Chicago and North Western railroad line. Reclamation work has not been fully completed on the abandoned railroad line. Burlington Northern continues to operate its rail line which extends through the central portion of the area, parallel to the river. Chicago and North Western Railroad Company jointly use the Burlington Northern line through this area. Several other transportation and utility lines, including power lines and oil and gas pipelines, traverse the area. The Big Muddy Oil Field, a historic field, covers much of the area. The South Glenrock and Geary Dome oil fields also cover portions of the area. Facilities associated with these fields include pumping units, oil tanks, flow lines, electric distribution lines, and numerous roads.

Wildlife Resources

The Cole Creek roost area contains a golden eagle nest in a cottonwood stand. This riparian zone of the North Platte River has a wide variety of shrubs and other plants, so a greater diversity of wildlife is expected here than at most other roosts. The year-round availability of water in combination with the varied vegetation types would provide for many species of wildlife.

Wildlife species in this area include mule and white-tailed deer, pronghorn antelope, waterfowl, sage grouse, cottontail rabbit, red-tailed hawk, Swainson's hawk, bobcat, coyote, and fox. In the roost area, the primary game fishes of the North Platte River include rainbow, brown, and cutthroat trout, and channel catfish. Beaver, muskrats, mink, and river otters, aquatic animals not found in the other roost areas are likely to be found here.

Two black-tailed prairie dog towns are within the roost area and a third prairie dog town is nearby, so the area has potential as black-footed ferret habitat.

Geologic Setting

The roost area is underlain by Quaternary windblown deposits (sand dunes), Quaternary alluvial deposits of silt, sand and gravel, the Cretaceous Lance Formation, and the Cretaceous Cody Shale (Lageson 1980).

The roost area is on the southern margin of the Powder River Basin, which is known for its extensive deposits of coal, and for oil and gas production. There are no significant structural geologic features present within the boundaries of the roost area.

Mineral Resources

Mining claim records dated February 19, 1991 were checked, and there are no active mining claims present within the roost area.

There are no known occurrences of locatable minerals within the area. There are no permits, sale contracts, or other federally authorized actions for the mining and removal of mineral materials (sand and gravel) within the study area. However, the potential for this resource occurring is very high because of the alluvial material that was deposited in the river valley by the North Platte River. At least one large inactive gravel pit is located near the roost area in the SW¼, section 6, T. 33 N., R. 76 W. The pit is located on state of Wyoming land, is now full of water, and appears to be abandoned.

The roost area may contain some coal seams, and it appears to have been mined sporadically in the past. Two abandoned coal mines are shown on the topographic maps near the roost. The Big Muddy Coal Mine is located in the SW¼, section 25, T. 34 N., R. 77 W., and the Lockett Mine is located in the SW¼, section 32, T. 34 N., R. 76 W. Not much is known about these mines, but it is likely they were developing thin coal seams in the Lance Formation. As a result, the subject parcel probably has some minor value for coal resources.

The roost area contains known reserves of oil and gas. It is located on the northern edge of the South Glenrock A Unit oil field. This oil field occupies a portion of the S½ of section 36, T. 34 N., R. 76 W. The field produces oil from the Cretaceous Dakota Sandstone and waterflood recovery operations are underway. The roost area is also located on the edge of several large oil and gas fields such as Big Muddy Field to the southwest, and the South Cole Creek Field to the north.

Rangeland Resources

The public land in this area is located in the Boner grazing allotment (10005). The type of use is cattle and sheep. The licensed use is yearlong.

No range improvement projects are planned on public land for this area at this time. Fences are the only range improvements known to exist in the area.

Soils and Vegetative Types

Soil mapping has not been done for this part of Converse County. Based on available information, most of the soils in this area were probably formed in alluvium or residuum as well as from eolian deposits derived from sandstone, shale, or other sedimentary rock. Sand dunes can be found in the northern part of the area. The soils range from shallow to deep and most have either a loamy or sandy texture. Some clayey or clay loam textured soils are probably present.

The area is mainly a sagebrush-grass vegetative type. The principle shrubs are big sagebrush, silver sagebrush, and rabbitbrush. The grasses vary but include western wheatgrass, needle-and-threadgrass, junegrass, blue grama, threadleaf sedge, and some little bluestem. The major range sites are loamy, shallow loamy, sandy, sands, and shallow sandy. Some shallow clayey sites may be present. Lowland and overflow sites can be found along the North Platte River. All range sites are in the 10- to 14-inch NP MLRA.

Land Use Capability

Oil and gas production will continue as the dominant industrial use of this roost area into the foreseeable future. Recreational pursuits associated with the river will continue, as will big game hunting in outlying areas. If BLM's proposed easement is acquired, an additional recreational facility could be available along the river. Most likely this would be limited to a boat ramp and parking lot.

BOXELDER CREEK ROOST

General Setting

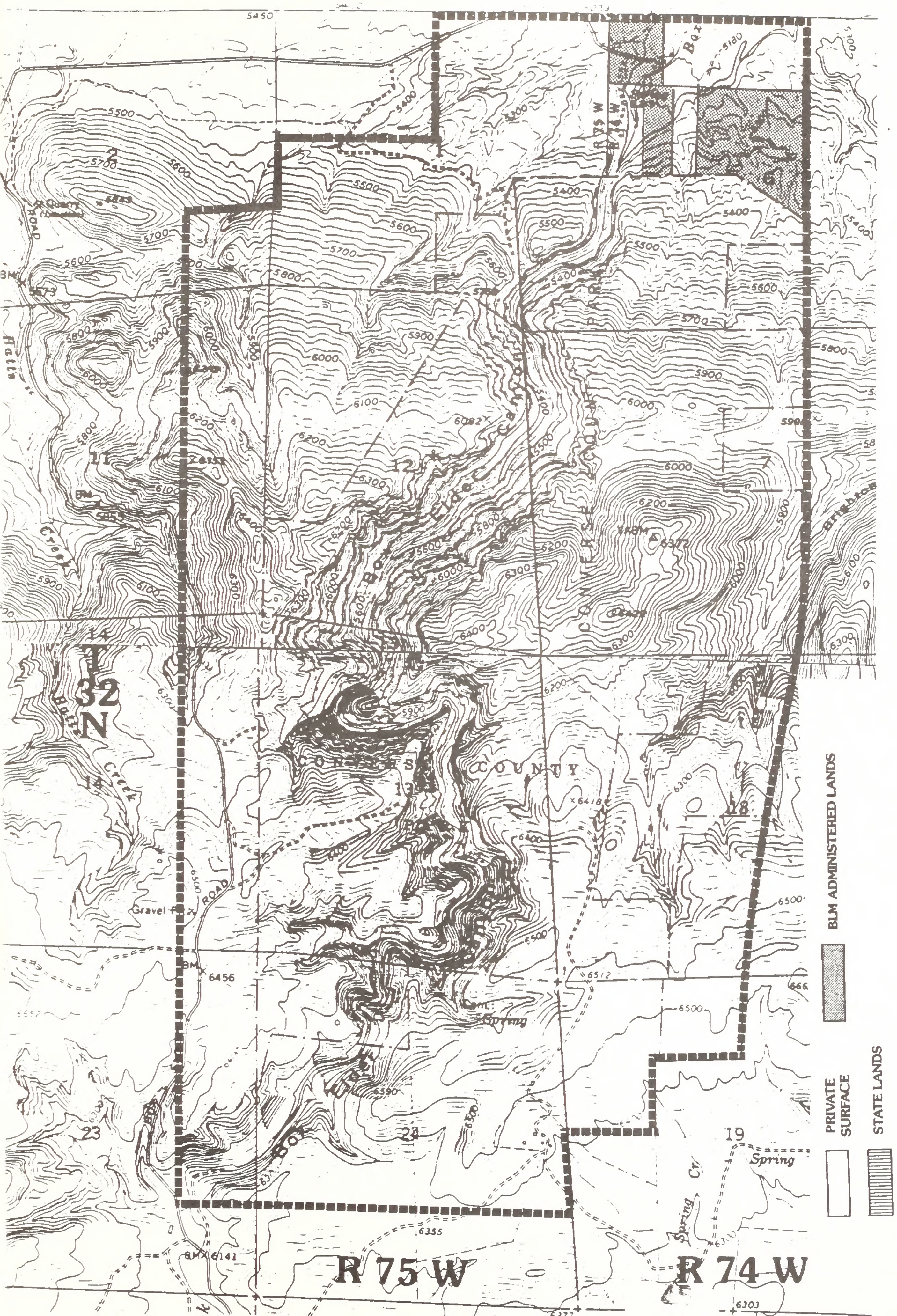
The Boxelder Creek roost is located in Boxelder Canyon in southwestern Converse County, approximately 11 miles south of Glenrock, Wyoming. The roost area occupies portions of sections 6, 7, 18 and 19, T. 32 N., R. 74 W., and sections 11, 12, 13, 14, 23 and 24, T. 32 N., R. 75 W. Map 6 shows the roost area.

Boxelder Canyon, the major topographic feature of the area, is located on the northern extremes of the Laramie Mountain Range. This narrow, steeply incised canyon is carved into bedrock with approximately 500 to 700 feet of vertical relief from the floor to the top of the escarpment. Elevations within the roost area range from approximately 6,590 feet above sea level at the southern end to approximately 5,200 feet above sea level at the northern end, over roughly 3½ miles. The entire roost is drained into the North Platte River by Boxelder Creek, a perennial stream.

Land Status

Most of the land in this roost area is owned by Converse County. Title was conveyed to the county for Boxelder Park by a special act of Congress. A small block of federal land is present in the northeast corner of the area.

MAP 6



BOXELDER CREEK ROOST

Access

Wyoming Highway 90 (Boxelder Road) extends along the western edge and into the southwest corner of the Boxelder Creek roost area. Legal and physical access to the area is available over this highway and the few roads that extend into the Boxelder Park. Vehicle access through most of the area is constrained by steep and extremely rugged terrain, including the canyon formed by Boxelder Creek.

Land Uses and Recreation Resources

The Boxelder Park comprises most of the Boxelder Creek roost area. There are few minimal developments, and most of the area remains in a natural state. Converse County leases park lands for grazing. In a memorandum of agreement between the WGFD and the Converse County Commission (1978) the commission agreed that administration and future use of Boxelder Canyon would be directed to prevent human use-bald eagle conflicts, and to maintain environmental qualities required by bald eagles. An old railroad right-of-way crossed into the northwest corner of the area, but it was apparently abandoned many years ago.

Wildlife Resources

Bald and golden eagles use this roost. Wildlife species of interest include elk, bighorn sheep, mule and white-tailed deer, pronghorn antelope, turkey, blue grouse, sage grouse, cottontail rabbit, prairie falcon, northern goshawk, black bear, mountain lion, bobcat, coyote, and fox.

Boxelder Creek is a perennial stream, with rainbow, brown, and brook trout. There is a pronghorn antelope crucial winter range just outside the north border of the roost area.

Geologic Setting

According to Lane (1972), the roost area is underlain primarily by the Permian Casper Formation, Mississippian Madison Formation and Precambrian igneous and metamorphic rocks.

Structurally, the area is part of a mountain range which was uplifted during a period of mountain building known as the Laramide Orogeny. The major geologic structural feature present within the roost area is probably a thrust fault zone, which trends east to west along the northern boundary of the roost area. The fault essentially separates the younger sedimentary formations of the Powder River Basin from the older, uplifted igneous and metamorphic rock complexes of the Laramie Mountain Range.

Mineral Resources

Mining claim records dated February 19, 1991 were checked, and there are no valid mining claims located within the eagle roost area.

There are no documented occurrences of locatable mineral resource within the roost area. However, according to Lane (1972), copper was mined and shipped from the Jasper Mine in T. 32 N., R. 75 W. (no section) during World War I. The copper mineralization was reported to have occurred in fracture fillings and mineralized replacement fillings at the top of the Cambrian Flathead Sandstone.

There are no permits or contracts for sale of mineral materials within the study area. Although portions of the Madison Limestone might be suitable for use as a construction aggregate, interest in its use as such is presently very low to nonexistent.

Oil and gas potential of the roost area is low due to the presence of Precambrian age granitic "basement" rock formations within the roost area.

Rangeland Resources

All of the public land located in the roost area boundary is part of the Bixby grazing allotment (00176) which is used for cattle. The three other major operators near the area, True Ranches, Green Valley Inc. and Duncan Ranches primarily run cattle. Use is licensed on a year-round basis.

No range improvement projects are being considered on public land at this time in this area. Existing range improvements include fences, reservoirs, and some spring developments.

Soils and Vegetative Types

The soils in this area have not been mapped. Based on what is known, the soils range from shallow to deep. The majority of the soils are probably shallow and in places quite rocky. Most of the soils were probably formed in alluvium or residuum derived from sedimentary rock. The hazard from water erosion probably varies from moderate to severe.

The vegetative types for this area include sagebrush-grass, tree-grass, and woodland types. Big sagebrush, black sagebrush, three-tip sagebrush, and snowberry are the major shrubs. The grasses vary, but include rhizomatous and bluebunch wheatgrass, needlegrass, Idaho fescue, bluegrass, junegrass, and sedges. Ponderosa pine is the dominate tree with limber pine, juniper and some aspen present. The range sites for this area are very shallow, shallow loamy, loamy, and course upland in the 10- to 14-inch NP and 15- to 19-inch FMSE MLRA.

Land Use Capability

Congressional dedication of this area as a public park assumes this use will continue indefinitely. Limitations on land use imposed by the county and the memorandum of agreement between the county and the WGFD for park lands are expected to continue. BLM has identified most of the federal lands in the area for disposal to support public purpose uses. Generally the intent was an expansion of the park area, if and when the need arises. Thus, it is believed that there will be no substantive change in the use of these lands.

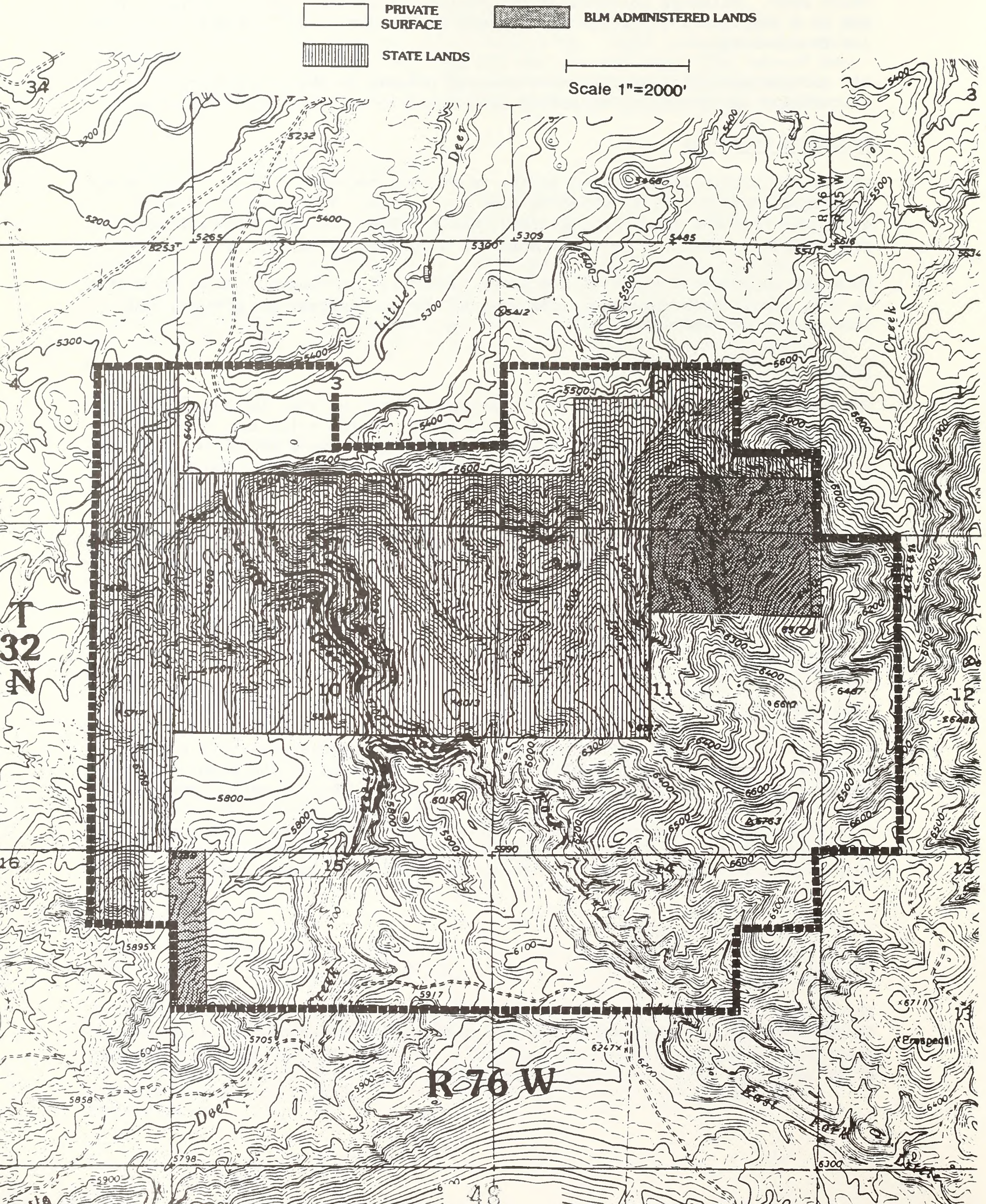
LITTLE DEER CREEK ROOST

General Setting

The Little Deer Creek roost is in Little Deer Creek Canyon, in southwestern Converse County, approximately 8 miles southwest of Glenrock, Wyoming. The roost area occupies portions of sections 2, 3, 4, 9, 10, 11, 12, 14, 15 and 16 of T. 32 N., R. 76 W. Map 7 shows this roost area.

MAP 7

LITTLE DEER CREEK ROOST



Little Deer Creek Canyon is on the northern extremes of the Laramie Mountain Range. It is in mountainous terrain of steep to vertical canyons, steep hillsides, and deeply incised drainages. Elevations within the roost area range from a high of 6,763 feet above sea level to a low of approximately 5,400 feet above sea level, a difference of 1,363 feet in roughly 2 miles.

The major topographic feature is the Little Deer Creek Canyon, a narrow, deeply incised canyon carved into the bedrock. The canyon has approximately 400 to 500 feet of vertical relief from the canyon floor to the top of the escarpment. The roost area is drained by Little Deer Creek, which is a perennial stream flowing northward into Deer Creek. Deer Creek drains northward, joining the North Platte River at Glenrock.

Land Status

Only two small federal land parcels are present in the Little Deer Creek roost area. These are at extreme ends of the area, but they are connected to a large, contiguous block of state land.

Access

No legal access is available to the Little Deer Creek roost area, and it is almost devoid of access roads. The few trails that encroach into the area are confined adjacent to the exterior boundaries. Steep, rugged topography and a steep canyon virtually eliminate access through the area.

Land Uses and Recreation Resources

Livestock grazing and wildlife habitat are the primary uses of this roost area. No authorizations other than grazing have been issued for the federal lands.

Wildlife Resources

Bald and golden eagles use this roost. Other wildlife species in this roost include big game, upland game birds, small game mammals, raptors, mammalian predators, non-game birds, and non-game mammals. Some species of public interest are elk, big horn sheep, mule deer, turkey, blue grouse, cottontail rabbit, prairie falcon, Northern goshawk, black bear, mountain lion, bobcat, coyote, and fox.

There are brook trout in Little Deer Creek. It has been reported that there are raptor nests in the canyon, but the number of nests and species of raptors are not known.

Geologic Setting

Geologic formations present at the surface in the roost area include the Triassic Goose Egg Formation, the Permian Casper Formation, the Mississippian Madison Formation and, Precambrian granite (Love 1985).

Structurally, the area is part of a mountain range which was uplifted during a period of mountain building known as the Laramide Orogeny. The primary structural feature present in the roost area is the thrust fault zone which trends east-west at the base of the mountain. The thrust fault essentially separates the younger sedimentary formations of the Powder River Basin from the older, uplifted, nonstratified igneous and metamorphic rocks of the Laramie Range.

Mineral Resources

Mining claim records dated February 19, 1991 were checked, and there are no valid mining claims located within the boundaries of the roost area.

Locatable minerals have been reported to occur inside the roost area. Scheelite, a tungsten mineral, has been reported to occur in sections 11, 12, 13 and 14, T. 32 N., R. 76 W. (Lane 1972). In addition, copper, asbestos, and vermiculite have all been found either in the subject township or neighboring ones.

There are no permits or contracts for sale of mineral materials such as sand and gravel or limestone within the buffer area. Although salable minerals are present (limestone), the potential for a sale is low due to the lack of proper market conditions and poor mining conditions at the site.

Rangeland Resources

All of the public lands in this area are leased to True Ranches, and are in the VR allotment (10164). The type of use shown on the grazing lease is cattle. The use is licensed on a year-round basis.

No range improvement projects are being considered on public land at this time in this area. Existing improvements include fences and some spring developments.

Soils and Vegetative Types

The soils in the Little Deer Creek roost area have not been mapped. However, due to this roost's proximity to the Boxelder Creek roost, BLM personnel believe soils would be very similar. For a more complete description, please see the "Soils and Vegetative Types" section for Boxelder Creek roost.

Land Use Capability

Because of the extremely rough terrain, the limited access, and the relative remoteness of the area, no change in land uses are expected in the future.

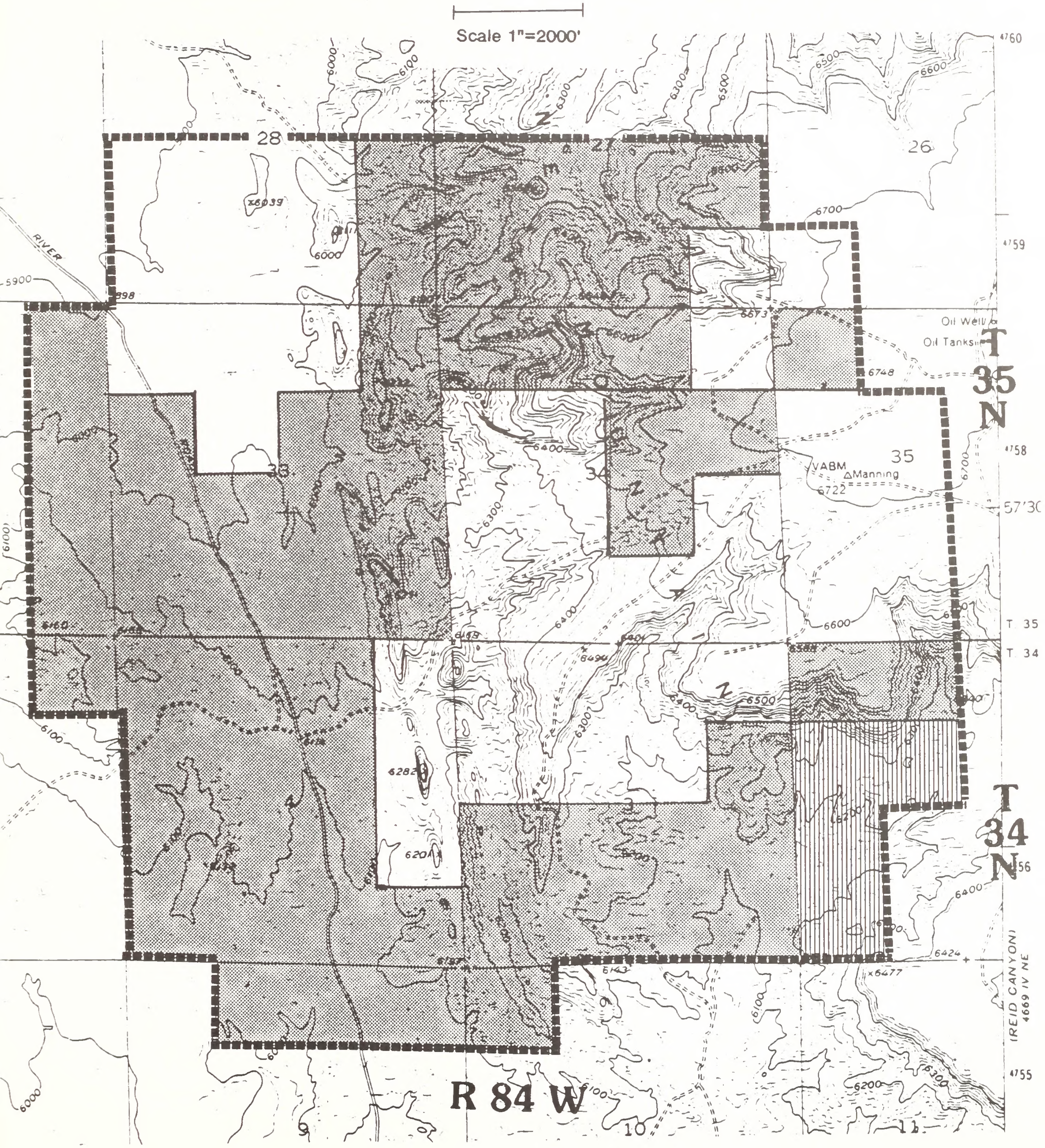
PINE MOUNTAIN WEST ROOST

General Setting

The Pine Mountain West roost is in central Natrona County, approximately 27 miles west of Casper and 6 miles southeast of Powder River, Wyoming. The roost area is on the western side of Pine Mountain and occupies portions of sections 2, 3 and 4, T. 34 N., R. 84 W. and sections 26, 27, 28, 32, 33, 34 and 35, T. 35 N., R. 84 W. Map 8 shows the Pine Mountain West roost.

MAP 8

PINE MOUNTAIN WEST ROOST



☐ PRIVATE SURFACE

▨ BLM ADMINISTERED LANDS

▥ STATE SURFACE- FEDERAL MINERALS

Pine Mountain is a broad, pine-covered dome with relatively steep sides and canyons and a fairly flat mesa-like top. Due to the dome-like structure of the mountain, deeply incised drainage patterns extend outward from the mountain in a radial pattern, somewhat like the spokes of a wheel. The radial drainage pattern is interrupted near the base of the mountain where the drainages are intercepted by large flatirons and hogback ridges made up of Frontier sandstones. These hogback ridges run parallel to the flanks of the mountain and basically encircle the structure. The drainage pattern changes at this point from a radial pattern to a trellis pattern. That is, drainages that run down the face of the mountain change to run parallel to the flank of the mountain. These drainages flow into a primary drainage, which runs at right angles to the tributary.

The South Fork of Casper Creek south of Pine Mountain, and Middle Fork of Casper Creek north of Pine Mountain, drain the general area. These creeks flow into Casper Creek, which empties into the North Platte River near Mills, Wyoming.

Elevations across the roost area range from 6,748 feet above sea level to approximately 5,898 feet above sea level for a difference of 850 feet.

Land Status

Several large contiguous blocks make up the federal land holdings within the Pine Mountain West roost area. These blocks have state and private lands abutting or intermingled. Most of the federal land in sections 4 and 9, T. 34 N., R. 84 W., is withdrawn for stock driveway purposes. The stock driveway withdrawal segregates the surface estate from disposal. Portions of the area are within a coal classification created by Secretarial Orders dated April 1, 1910 and April 11, 1910. The classification is an indication of coal potential, but it has no effect on land status other than for coal leasing.

Access

Physical access to the roost area is generally obtained from the east via the Natrona Road (Natrona County Road 209); then over a graveled road that crosses federal, state and private lands. Oil Camp Road (Natrona County Road 210) provides access to the western portion of this roost area, and a two-track trail off the county road also accesses the top of Pine Mountain. Legal access is available to almost all of the federal land within the roost area. However, legal public access is not available along all of the access roads. Rough topography limits the extent of vehicle access to portions of the area.

Land Uses and Recreation Resources

Livestock grazing and wildlife habitat are current uses in the Pine Mountain West roost. In addition, several producing oil and gas wells are present, and all of the federal oil and gas estate is leased. Several new communication site towers have been erected on private lands on top of the mountain.

Wildlife Resources

Bald and golden eagles use this roost, and there is one golden eagle nest. In this roost area, draws have water available only when it rains, or when snow is present. The variety of wildlife species is limited and includes big game, upland game birds, small game mammals, raptors, mammalian predators, non-game birds, and non-game mammals. Some species of public interest are mule deer, sage grouse, cottontail rabbit, prairie falcon, bobcat, coyote, and fox. The northwest portion of the roost area is pronghorn antelope crucial winter range.

Geologic Setting

Pine Mountain is along the western flank of the Casper arch, and is in the northeastern portion of the Wind River Basin. It is a breeched domal structure about 6 miles wide by 6 miles long. Formations exposed within the dome, from youngest to oldest, include the Cretaceous Cody Shale, Frontier and Mowry formations, the Jurassic Morrison Formation, and the Sundance Formation. Because of the dome-type structure of Pine Mountain, the oldest formations are exposed near the center of the dome with successively younger strata along the flanks of the dome.

According to Sundell (1986), "Pine Mountain is the largest structure on the Oil Mountain-Pine Mountain trend which is about seven miles west of and parallel to the Emigrant Gap Anticline."

Mineral Resources

Mining claim records dated February 19, 1991 were checked, and there are 12 active mining claims within the roost buffer zone boundaries. The claims are located in sections 28, 32 and 33, T. 35 N., R. 84 W.; and sections 3, 4 and 5, T. 34 N., R. 84 W.

There have been no reported occurrences of locatable minerals within the roost area. However, the existence of mining claims owned by a bentonite company would suggest that bentonite-bearing formations may be present. In addition, one anomalous radioactive reading on the east flank of the mountain has been documented. There are no permits, contracts, or sales of mineral materials due to lack of source material on Pine Mountain and lack of a market in the area.

Oil and gas has some documented potential on Pine Mountain. There are a total of six producing wells located there, two of which are within the roost area. Oil is produced from the Permian Phosphoria and Tensleep Sandstone formations from the Pine Mountain structure. The field has not been prolific, producing by 1989 only 105,050 barrels of oil since its discovery in 1914.

Rangeland Resources

The public land in this area is located in five grazing allotments--Eccles (20523), Pine Mountain (10134), Manning (10124), Strohecker (10065) and, Cummings (10028). The Eccles and the Manning allotments are used for sheep. The type of use is cattle for the Pine Mountain, Strohecker, and Cummings allotments. All are licensed on a yearlong basis.

No range improvement projects are being considered on public land in this area at this time. Existing improvements include fences, reservoirs, and springs.

Soils and Vegetative Types

Most of the soils in this area were formed in alluvium derived from either sandstone or sodic shale. They are generally deep and well-drained, and the hazard of water erosion is slight. Soil textures vary from loams to clays. The clayey soils are strongly alkaline. The major soil mapping units include Hiland sandy loam, 0 to 6% slopes; the Terro-Vonalee association, rolling, 3 to 15% slopes; and, the Arvada-Absted-Slickspots complex, 0 to 6% slopes. There are four other mapping units in the area (appendix I).

This area consists primarily of a shrub-grass vegetative type. Tree-grass vegetative types are also present. The major shrubs are big sagebrush, black sagebrush, birdfoot sagebrush, and saltbush. Ponderosa pine dominates, with limber pine and junipers growing in parts of the area. The major range sites include very shallow, shallow loamy, shallow sandy, and impervious clay 10- to 14-inch HPSE MLRA.

Land Use Capability

Few substantial changes in land use are expected on Pine Mountain. Additional communication facilities may be developed, and continued oil and gas exploration is likely.

PINE MOUNTAIN EAST ROOST

General Setting

The Pine Mountain East roost, or Baerthel Canyon, is in central Natrona County, approximately 26 miles west of Casper and 3 miles southwest of Natrona, Wyoming. The roost area is on the northeastern side of Pine Mountain and occupies portions of sections 18, 19, 20 and 30, T. 35 N., R. 83 W. and sections 13, 14, 23, 24 and 25, T. 35 N., R. 84 W. The roost area is shown on map 9.

A description of Pine Mountain and its drainage patterns can be found under the "General Setting" section for the Pine Mountain West roost.

Elevations across this roost range from 6,660 feet above sea level to approximately 5,700 feet above sea level. This is a difference of 960 feet.

Land Status

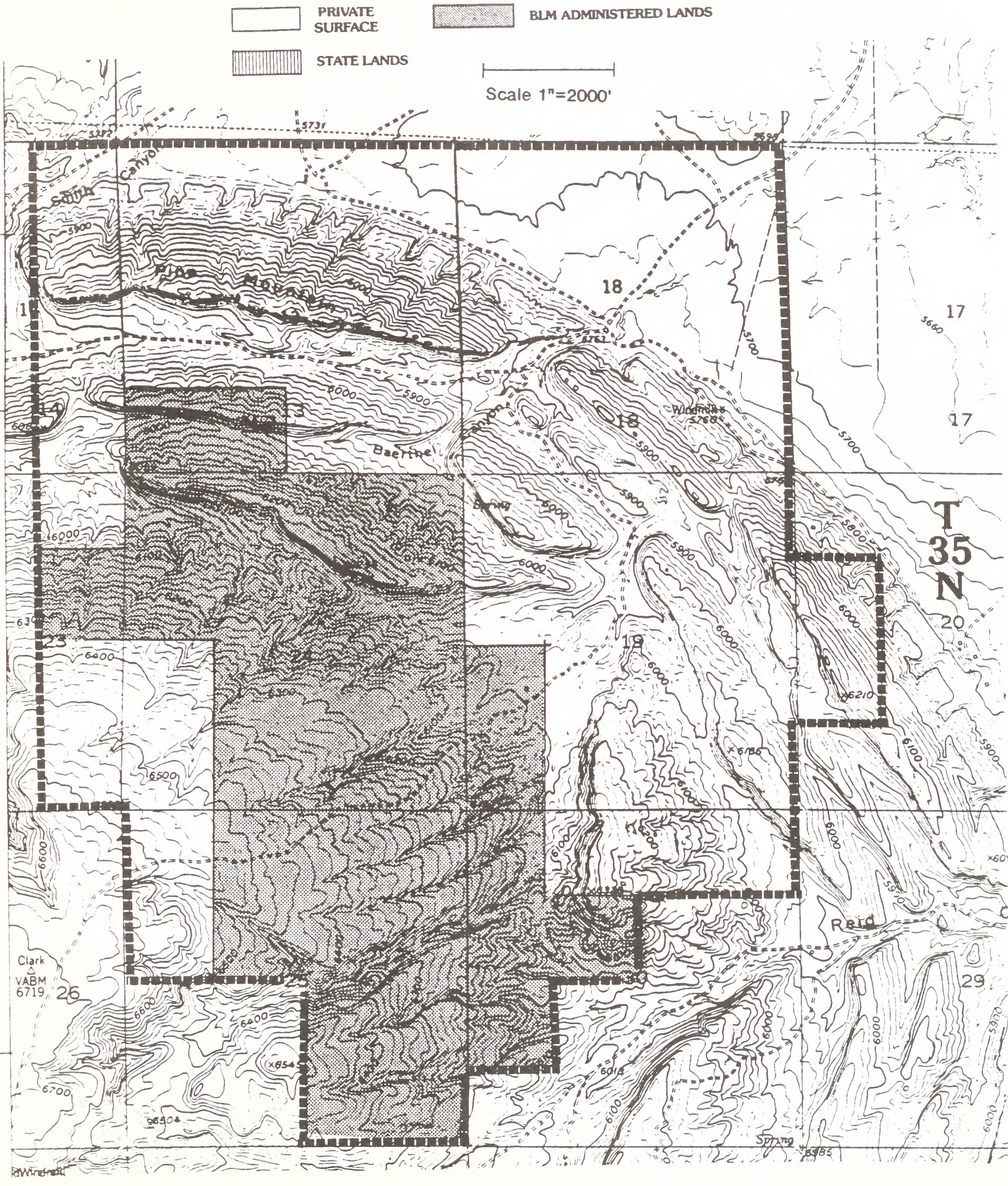
The federal land in the Pine Mountain East roost area is in a single, consolidated block bordered by state land on the south and private land on all other sides.

Access

Physical access to the Pine Mountain East roost area is by the same county road and graveled road as for the Pine Mountain West roost. An additional road extends to the Pine Mountain East roost area and crosses federal and private lands. Access through the area is restricted primarily by rough topography on the steeper slopes of Pine Mountain.

MAP 9

PINE MOUNTAIN EAST ROOST



Land Uses and Recreation Resources

Livestock grazing and wildlife habitat are the primary uses of this roost area. No authorizations, other than grazing and oil and gas leases, have been issued.

Wildlife Resources

Bald and golden eagles use this roost. The draws in this roost area have water available only when it rains, or when snow is present, so the variety of wildlife species is limited. Wildlife species in this roost include big game, upland game birds, small game mammals, raptors, mammalian predators, non-game birds, and non-game mammals. Some species of public interest are mule deer, pronghorn antelope, sage grouse, cottontail rabbit, prairie falcon, bobcat, coyote, and fox.

Four raptor nests, two prairie falcon and two golden eagle, have been identified in the roost area. The north and northeast portions of the roost area are pronghorn antelope crucial winter range.

Geologic Setting

For a complete description of the geological setting of the area, please see the discussion under the Pine Mountain West roost.

Mineral Resources

Mining claim records dated February 19, 1991, were checked and there are eight active mining claims within the roost area. These are located in sections 19 and 30, T. 35 N., R. 83 W. and sections 13, 23 and 24, T. 34 N., R. 84 W.

There have been no reported occurrences of locatable minerals within this roost. However, the mining claims owned by a bentonite company would suggest that bentonite-bearing formations may be present.

As stated in the "Mineral Resources" section for the Pine Mountain West roost, there are no permits, contracts, or sales of mineral materials in the area.

There are six producing wells located on Pine Mountain, two of which are located within the roost area. Oil is produced from the Permian Phosphoria and Tensleep Sandstone formations from the Pine Mountain structure. The field has not been prolific, producing by March 1991 only 95,754 barrels of oil since its discovery in 1914 (Wyoming Oil and Gas Commission 1991).

Rangeland Resources

The public land in this area is located in two grazing allotments. These are the Pine Mountain (10134), and the Manning (10124). Pine Mountain is primarily cattle use, and Manning is primarily sheep. Both are licensed on a yearlong basis.

No range improvement projects are being considered on public land in this area at this time. Existing improvements include fences, reservoirs, and spring developments.

Soils and Vegetative Types

Most of the soils in this area were formed in slopewash alluvium or residuum derived from sandstone or shale. Some were formed in eolian deposits derived from sandstone. The major soil mapping units are Boettcher-Pinelli-Worfman loams, 3 to 15% slopes; the Neldore-Mayerson-Rock outcrop complex, 10 to 30% slopes; Orella-Cadoma-Petrie clay loams, 3 to 30% slopes; and, the Vonalee-Hiland complex, 3 to 15% slopes. There are three other mapping units in this area (appendix I).

This area consists primarily of sagebrush-grass and woodland vegetative types. The principle shrubs are big sagebrush and black sagebrush with birdfoot sagebrush and saltbush found on some sites. Limber pine, Rocky Mountain juniper, and ponderosa pine are the major trees in this area. The predominate range sites include shallow clayey, impervious clay, sandy, loamy and shallow loamy in the 10- to 14-inch HPSE MLRA.

Land Use Capability

No substantive land use changes are expected at the East Pine Mountain roost area.

BIG SULFUR SPRINGS ROOST

General Setting

The Big Sulfur Springs roost area is in north-central Natrona County, approximately 22 miles north of Natrona, Wyoming. The roost area occupies portions of Sections 5 and 6, T. 38 N., R. 83 W.; section 1, T. 38 N., R. 84 W.; sections 29, 30, 31, 32 and 33, T. 39 N., R. 83 W.; and sections 25 and 36, T. 39 N., R. 84 W. Map 10 shows the roost area.

The area is in the southernmost foothills of the South Big Horn Mountains. It is characterized by southward-dipping mesa-like hills, pine-covered ridgelines and escarpments, and deeply incised drainages. The areas below the escarpments are badland in appearance due to the presence of softer sedimentary rocks.

Big Sulfur Draw is an ephemeral stream that drains into the South Fork of the Powder River, which in turn flows into the Powder River.

Elevations range from approximately 6,200 feet above sea level to approximately 5,540 feet above sea level, a difference of 660 feet across the study area.

Land Status

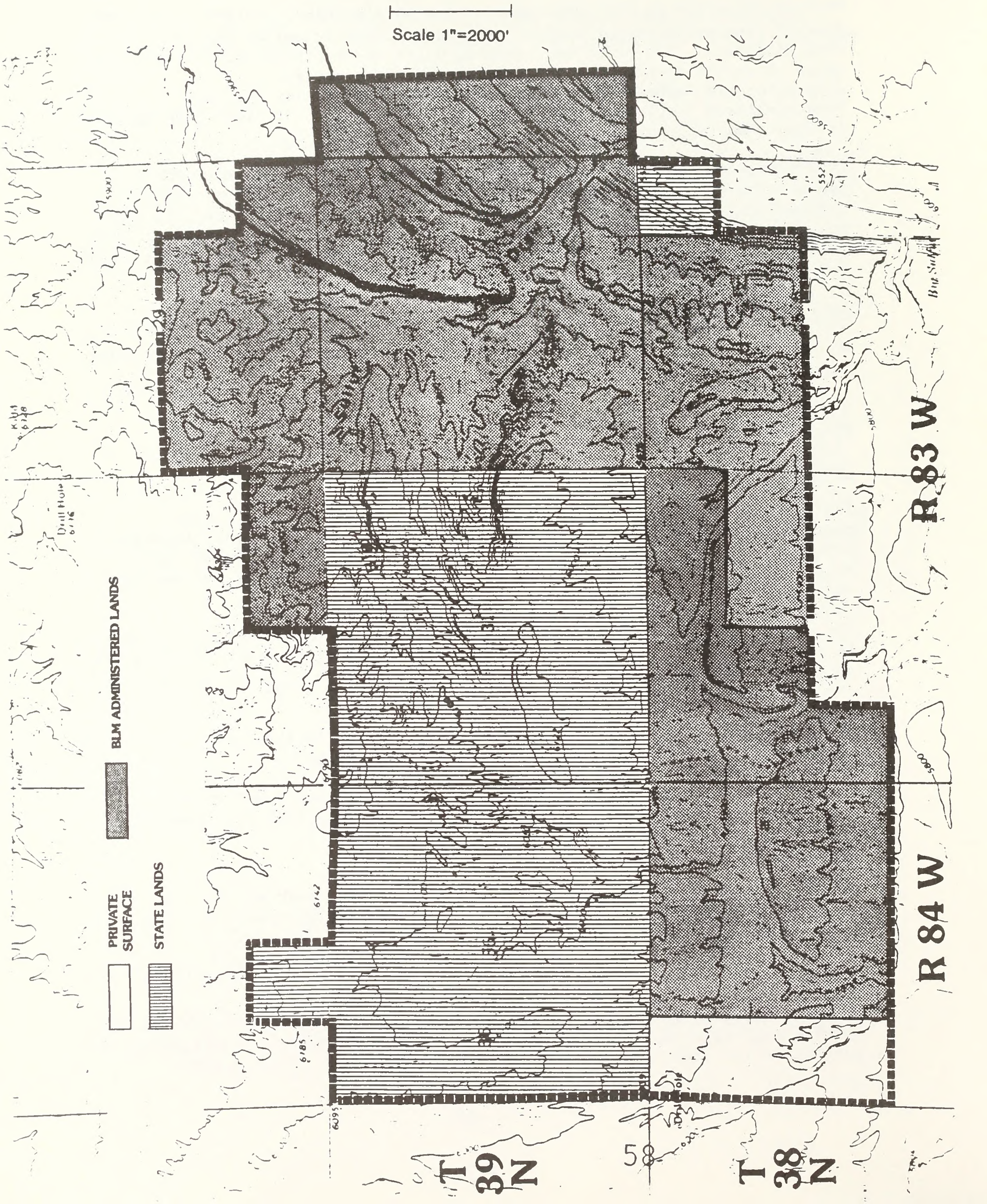
The federal lands in this roost area are in a single block which forms part of a very large complex of federal lands. State and private lands are also well blocked, intermingled with the federal lands.

Access

Physical access into the Big Sulfur Springs roost is available by way of the 33 Mile Road (Natrona County Road 110) or the Lester Trail. A few trails are present in the area, but they are generally very rough and of minimal

MAP 10

BIG SULFUR SPRINGS ROOST



construction. Legal access is available over an existing trail off the 33 Mile Road near Lone Bear Creek. The road crosses federal land and the corner of a state land parcel. However, the road stops approximately 3/4 mile short of the roost area boundary due to topographic constraints. Legal access by foot is available over the remaining distance.

Land Uses and Recreation Resources

Livestock grazing and wildlife habitat are the primary uses in this roost area. This roost area lies within large, popular big game hunting areas (deer 34, antelope 73).

Wildlife Resources

Bald and golden eagles use this roost. The draws in this roost area have water available only when it rains, or when snow is present, so the variety of wildlife species is limited. Wildlife species found in this roost are basically the same as those found in the Pine Mountain West roost. Two buteo (broad-winged hawk) nests and one golden eagle nest have been recorded within the Big Sulphur Draw roost area.

Geologic Setting

Located in the Wind River Basin on the northern extremes of the Casper arch, this area makes up a portion of the southernmost foothills of the Big Horn Mountains. The Casper arch is a topographically low up-warp, approximately 50 miles long, trending southeastward towards Casper and terminating against the west end of Casper Mountain (Heath 1982). In the roost area, the Casper arch terminates a short distance to the northwest against the southern Big Horn Mountains. A series of anticlines and synclines parallel the low up-warp of the Casper arch, and includes the Emigrant Gap anticline and the Oil Mountain-Pine Mountain trend.

Geologic formations exposed in the roost area include, from the youngest to oldest, the Cretaceous Age Frontier, Mowry and Cloverly formations, and the Jurassic Morrison Formation. The Frontier Sandstone is a cliff-former in the southern portion of the area. It also forms a dip slope on the southern exposure of the hills leading up to the escarpments. Progressively, older formations are exposed as one traverses the study area from south to north.

Mineral Resources

Mining claim records dated February 19, 1991, were checked, and there are 55 active mining claims located within the roost area. These are located in sections 5 and 6, T. 38 N., R. 83 W.; sections 29, 30, 31, 32 and 33, T. 39 N., R. 83 W.; and section 1, T. 38 N., R. 84 W.

There are no documented occurrences of locatable minerals within the roost area. However, the existence of mining claims owned by a bentonite company would indicate that bentonite bearing formations may be present. In addition, two of the primary bentonite-bearing formations in the county, the Frontier and Mowry, are found within the roost area.

There are no permits or contracts for sales of mineral materials within the roost area. Although, there may be some small potential for sand and gravel from alluvial deposits, it is very slight due to lack of demand in the vicinity.

Oil and gas potential is unknown. The areas immediately adjacent to the north and to the west of the area have been tested by drilling. A total of three holes were drilled in section 30, T. 39 N., R. 83 W., and all were dry. A well drilled to the west in section 2, T. 38 N., R. 84 W., was also a dry hole.

Rangeland Resources

The public land in this area is located in two grazing allotments. These are the Coffman (10024), and the Basket (10033). Morel Livestock leases the Coffman allotment and runs cattle and sheep. Howard Farms leases the Basket allotment and runs sheep. Both are licensed on a year-round basis.

No range improvement projects are being considered on public land in this area at this time. Existing improvements include fences and reservoirs.

Soils and Vegetative Types

Most of the soils in this area were formed in either residuum or slopewash alluvium derived from calcareous and noncalcareous shales. Two soil mapping units make up most of the Big Sulphur Springs roost area—the Neldore-Moyerson-Rock outcrop complex, 10 to 30% slopes; and, the Delplain-Rock outcrop complex, 3 to 30% slopes. There are five other mapping units found in the area (appendix I). Most of the soils have a clay or clay loam texture, and the hazard for water erosion is moderate to high.

This area consists primarily of a shrub-grass vegetative type. Tree-grass and woodland vegetative types are also present. Big sagebrush, birdfoot sagebrush, saltbushes, and winterfat are the major shrubs. Wheatgrass, needlegrass, and bluegrass are the major grasses. Ponderosa pine, limber pine, and Rocky Mountain juniper are the dominant trees. The principle range sites are very shallow, shallow loamy, shallow clayey, and loamy in the 10- to 14-inch HPSE MLRA.

Land Use Capability

No substantive change in land uses is expected at this roost area.

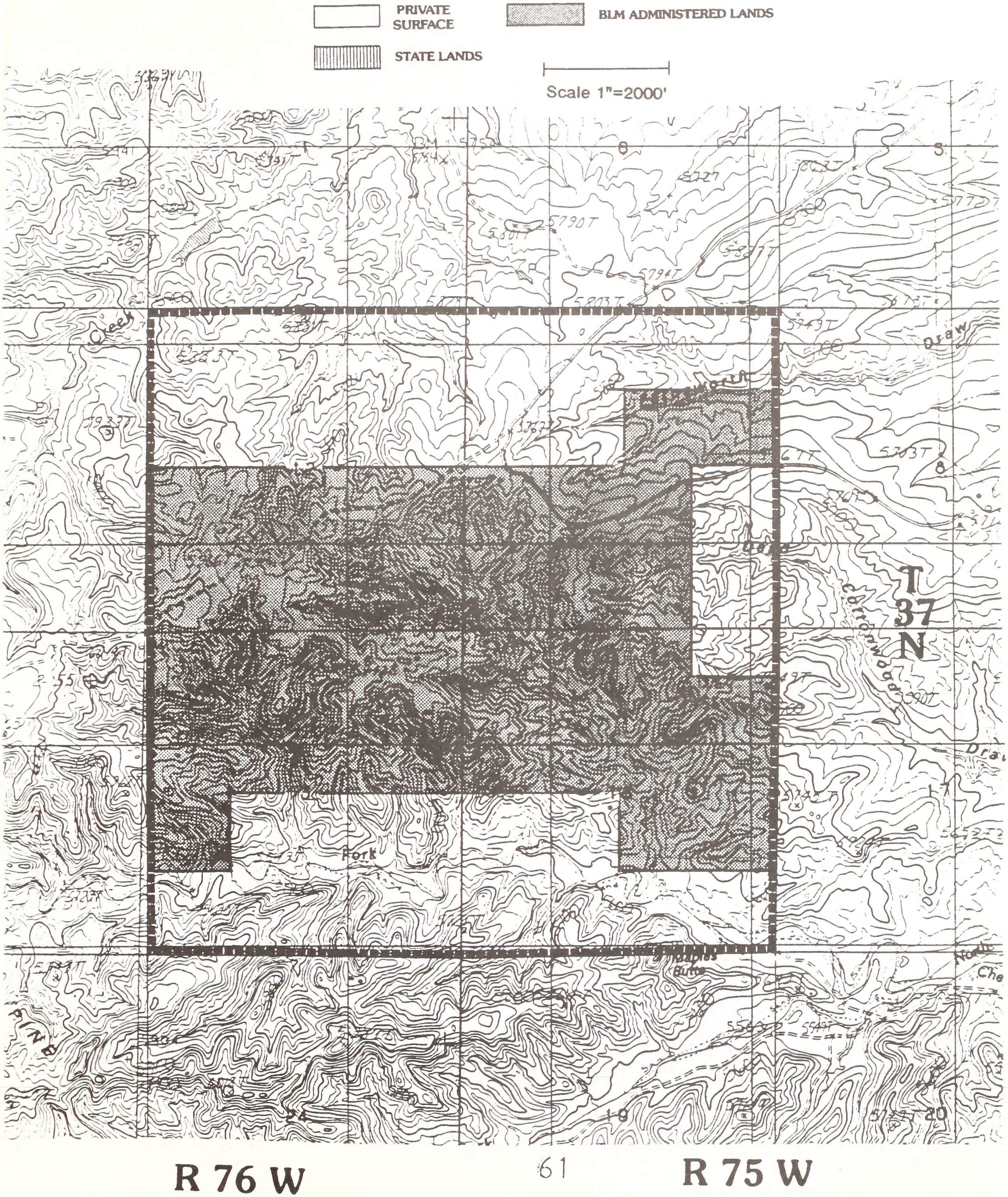
NORTH FORK CHEYENNE RIVER ROOST

General Setting

The North Fork Cheyenne River roost is in northwestern Converse County, approximately 24 miles north of Glenrock, Wyoming. The roost is in portions of sections 5, 6, 7, 8, 17, 18, 19 and 20, T. 37 N., R. 75 W. and sections 1, 2, 11, 12, 13, 14, 23 and 24, T. 37 N., R. 76 W. The roost area is shown on map 11.

MAP 11

NORTH FORK CHEYENNE RIVER ROOST



It is located on Pine Ridge, a northwest-southeast trending topographic divide, separating the eastward-flowing streams of the Missouri River drainage basin from the northward flowing streams of the Yellowstone River drainage basin. It is an area of deeply incised, dendritically patterned drainages, and steep hills and ridges.

The study area itself is drained by the North Fork of the Cheyenne River which flows eastward into the Cheyenne River. The Cheyenne River runs eastward around the southern end of the Black Hills uplift, and eventually drains into the Missouri River in South Dakota.

Elevations across the roost area vary from approximately 6,060 feet above sea level to approximately 5,550 feet above sea level, a difference of 1,010 feet.

Land Status

All the federal land in this area is in a single block, forming part of a larger federal land block. Private land adjoins the federal land on the north, east, and south. No state lands are present. Portions of the area are within the Powder River Basin known coal leasing area.

Access

Physical access to this area is by existing roads and trails off the 55 Ranch Road (Converse County Road 23). Several roads into this general area have been built or upgraded for access to oil and gas drilling locations. Legal access to the roost area is not available.

Land Uses and Recreation Resources

Livestock grazing and wildlife habitat are the primary uses in this roost area. Oil and gas development is occurring in portions of the area. A great deal of recent interest in, and drilling for, oil and gas has occurred in areas to the south.

Wildlife Resources

Bald and golden eagles use this roost. Water is available in draws in this roost area only when it rains, or when snow is present, so the variety of wildlife species is limited. Wildlife species present are virtually the same as those found in the Big Sulfur Springs and Pine Mountain West roosts. The roost area is within the nesting area of a nearby sage grouse lek.

Geologic Setting

The roost area is in the southwestern portion of the Powder River Basin, a broad, northwesterly trending intermontane basin between the Big Horn Mountains on the west and the Black Hills uplift on the east. Structurally, it is an asymmetrical syncline with the axis trending north-south along the western margin of the basin adjacent to the Big Horn Mountains.

The geology at the roost area is relatively simple--no faults or major structures are apparent. One formation, the Tertiary Fort Union, is present on the surface of the roost area.

Mineral Resources

Mining claim records dated February 19, 1991 were checked, and there are no active mining claims within the roost area. However, according to the records the entire area was staked at one time with claims for uranium. These claims have all expired, or have been dropped, and the case files closed. As a result, there may be some future potential for uranium in the area. It is also within a known uranium-bearing district in the Powder River Basin.

The roost area is also within, or on the margins of, the Dry Cheyenne coal field. The coal-bearing strata present in the coal field include the Tertiary Fort Union and Wasatch formations. Three coal beds are exposed in the field, and are designated from the lowest to the highest as the H, G, and F beds.

The area probably has high potential for oil and gas exploration. Phillips Petroleum Company recently drilled and completed the Number 1 Federal well in the NE¼NE¼ of section 10, T. 37 N., R. 76 W. The well was completed in the Muddy Sandstone and had an initial production of 156 barrels of oil per day and 153,000 cubic feet of gas per day. Large producing oil fields, such as the Sand Dunes Field, have recently been discovered to the south. The wells there produce from the Cretaceous Frontier, Muddy, and Dakota formations. As a result of these discoveries, drilling activity and interest has continued in the immediate vicinity of the roost area.

There are no sales or permits for mineral materials within the roost area.

Rangeland Resources

The public land in this area is located in the Henry allotment (10108), and the Patterson allotment (00497). Both operators run cattle and sheep, and they are licensed on a year-round basis.

No range improvement projects are being considered on public land in this area at this time. Existing improvements include fences and reservoirs.

Soils and Vegetative Types

The majority of the soils in this area were formed in residuum derived from calcareous shale or sandstone. The soils located along drainage bottoms were formed in alluvium derived from the various sedimentary rock located in the area. Most of the soils are shallow and well-drained. The hazard to water erosion is mostly severe. Two soil mapping units make up most of the area--the Shingle-Rock outcrop-Samday complex, 10 to 30% slopes; and, the Worf-Shingle-Tassel complex, 3 to 30% slopes. The soils located along the North Fork of the Dry Fork of the Cheyenne River are in the Larkelen-Drabnab complex, 0 to 3% slopes map unit. Soil textures range from clay loam to loamy sand and sand.

This area consists of sagebrush-grass, tree-grass, and woodland vegetative types. Big sagebrush and rabbitbrush are the most common shrubs. Bluebunch and rhizomatous wheatgrass, needle-and-threadgrass, bluegrass, and little bluestem are some of the more common grasses. Ponderosa pine is the major conifer. Some limber pine and juniper are also present. Cottonwood trees, snowberry, rose, and silver sagebrush can be found in some of the drainages. The major range sites are shallow loamy, shallow clayey, shallow sandy, loamy, and lowland in the 10- to 14-inch NP MLRA.

Land Use Capability

Other than oil and gas development, no land use changes are expected. Significant oil and gas production has been realized in the general area very recently. Drilling activity is likely to continue, with the associated access needs, well site construction, and oil and gas pipelines.

PINE RIDGE ROOST

General Setting

The Pine Ridge roost is in northeastern Natrona County and northwestern Converse County, straddling the county lines. It occupies portions of sections 2, 3, 10, 11, 12, 14 and 15, T. 39 N., R. 77 W. and sections 27, 28, 33, 34 and 35, T. 40 N., R. 77 W. The Pine Ridge roost is shown on map 12.

The roost is on Pine Ridge, a north-trending, low, topographic divide. For a more complete description of Pine Ridge, see the "General Setting" discussion under the North Fork Cheyenne River roost.

The elevations of the area range from 6,200 feet above sea level to 5,600 feet above sea level, a difference of 600 feet.

Land Status

With the exception of one isolated 40-acre parcel, the federal lands in this roost area are in large blocks which form part of a larger complex of federal lands. Private lands are also well blocked, and are intermingled with the federal land blocks. No state lands are present.

Access

Access to this roost is available over existing trails, though most are fairly rough. No legal access is available to this area.

Land Uses and Recreation Resources

Livestock grazing and wildlife habitat are the primary uses in this roost area. An oil pipeline right-of-way is one of the more prominent man-made features in the area.

Wildlife Resources

Like all the other roosts, bald and golden eagle use this roost. The same wildlife species found in the North Fork Cheyenne River roost can be found here.

Geologic Setting

The geology of the Pine Ridge roost area is the same as that described for the North Fork Cheyenne River roost.

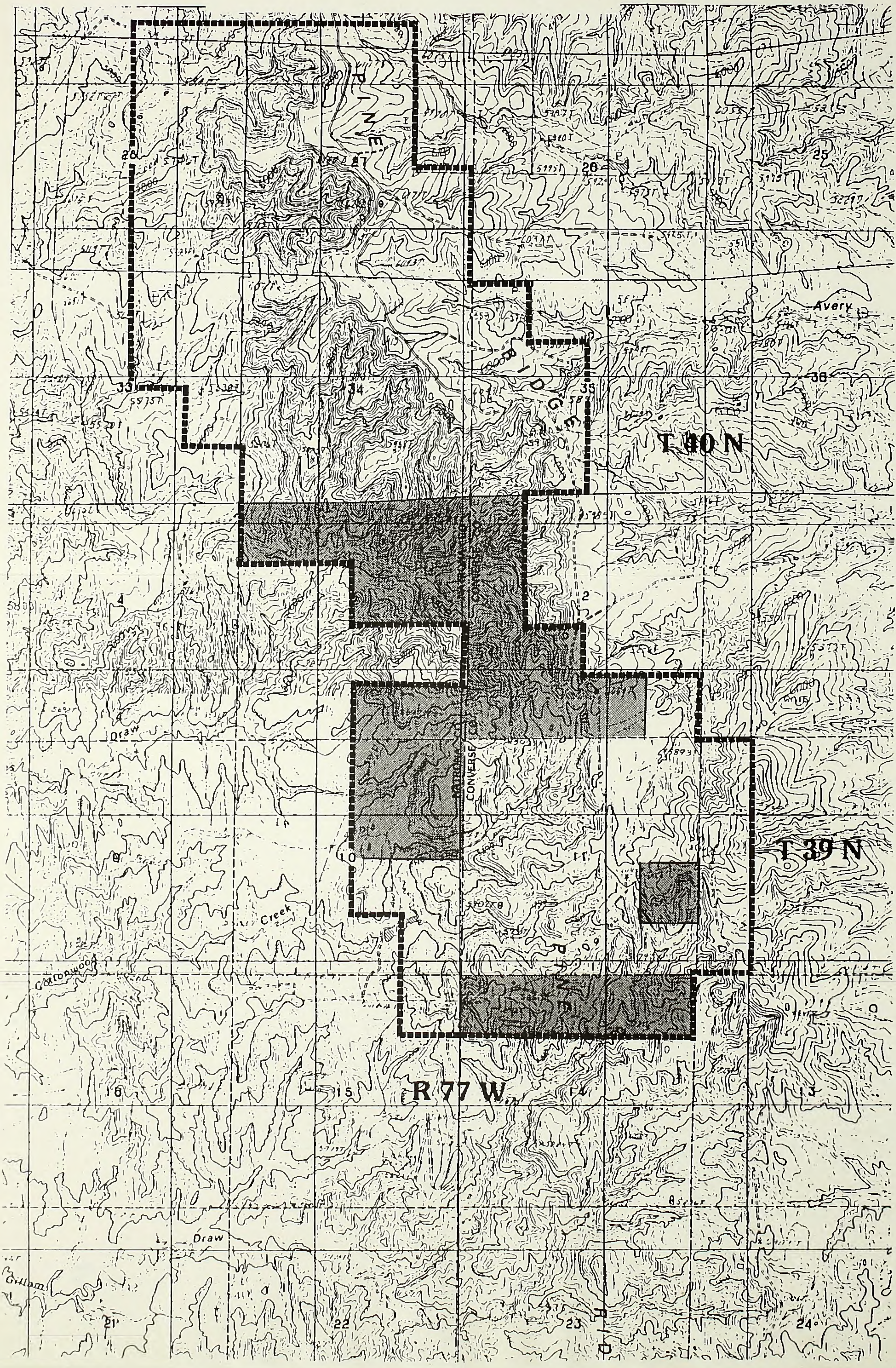
PINE RIDGE ROOSTS

☐ PRIVATE SURFACE

▨ BLM ADMINISTERED LANDS

▥ STATE LANDS

SCALE 1"=2000'



Mineral Resources

Mining claim records dated February 19, 1991 were checked, and like the North Fork Cheyenne River roost, there are no active mining claims within the roost area. At one time, the entire area was staked for uranium, but those claims have been dropped. Thus, the potential for uranium in this area is still present.

Coal-bearing strata, chiefly the Tertiary Fort Union Formation, are present within the roost buffer zone. As a result, there may be some minor potential for the occurrence of coal.

There may be some small potential for oil and gas within the roost area. It has previously been tested by two drill holes. One was located in the NE¼SE¼, section 34, T. 40 N., R. 77 W., and the other in the SW¼SE¼, section 11, T. 39 N., R. 77 W. Both were dry holes and were subsequently plugged and abandoned.

There are no permits or contracts for mineral materials in the area. The potential that mineral materials will be developed is very low, due to lack of a documented deposit and uncertain market conditions.

Rangeland Resources

All of the public land in this area is leased to Frank Shepperson. Physically, it falls in three different allotments. These are the Moore (00369), the Midwest (00115), and the Staple Three (10149). Shepperson controls the Midwest allotment and runs only cattle. His licensed use is April 1 through February 28. Moore and Staple Three run cattle and sheep. Both are licensed on a year-round basis, but due to the nature of the terrain, they probably do not use this area in the winter.

No range improvement projects are being considered on public land in this area at this time. Existing improvements include reservoirs, fences, water wells, and spring developments.

Soils and Vegetative Types

This area consists of steep, rolling terrain. The soils were formed in residuum and slopewash alluvium derived mainly from sandstone and shale. The soils are generally shallow and well-drained. The hazard for water erosion is severe. Soil texture varies and includes loam, sandy loam, sandy clay loam, and clay type soils. Two soil mapping units make up most of the area--the Gateridge-Taluce Variant association, 10 to 45% slopes; and, the Shingle-Samday complex, 3 to 45% slopes. There are three other mapping units in the area.

Shrub-grass, tree-grass, and woodland vegetative types are the vegetative types in this area. Ponderosa pine is the dominant tree, with limber pine and juniper present. Big sagebrush, rabbitbrush, and saltbush are the major shrubs. Grasses vary and include wheatgrass, needle-and-threadgrass, bluegrass, and sedges. The major range sites are very shallow, shallow loamy, sandy, loamy, and shale in the 10- to 14-inch and 15- to 19-inch NP MLRAs.

Land Use Capability

In this roost area, no substantive change in land uses is expected. However, oil and gas exploration and development is ongoing in nearby areas and may expand into this area as well. Although interest has been expressed recently in using Pine Ridge as a communication site for relaying microwave, cellular, and radio signals, most prospective right-of-way applicants have located on private land or at existing sites.

MILLER HILLS ROOST

General Setting

The Miller Hills roost area is in northeastern Converse County, approximately 5 miles south of Dull Center, Wyoming. It occupies portions of sections 7, 8, 17, 18, 19 and 20, T. 39 N., R. 67 W. and sections 12, 13, 14, 23 and 24, T. 39 N., R. 68 W. Map 13 shows this roost area.

Miller Hills forms a low, northeast-trending topographic ridgeline. The ridgeline is deeply incised by dendritically patterned drainages and steep slopes. The drainages trend to the northwest and to the southeast depending on which side of the ridgeline they are located. Cow Creek is the main drainage of the area. It flows eastward and drains into Lance Creek in north-central Niobrara County.

Elevations across the roost area range from approximately 5,000 feet above sea level to approximately 4,600 feet above sea level, a difference of 400 feet.

Land Status

All the federal land surface in this area is in the Thunder Basin National Grasslands, and is managed by the USFS. BLM continues to administer the federal minerals in the roost area in cooperation with the USFS. All the federal land in the unit is in one large block with private lands intermingled. No state lands are present. Most of these lands are within a coal classification created by Secretarial Order dated November 4, 1913. The classification is an indication of coal potential, but it has no effect on land status other than for coal leasing. Most of the land is also in the Powder River Basin known coal leasing area.

Access

Physical access through the roost area is available over several existing roads and trails, generally by way of the Cow Creek Road (Converse County Road 45). Legal access is not available into the roost area.

Land Uses and Recreation Resources

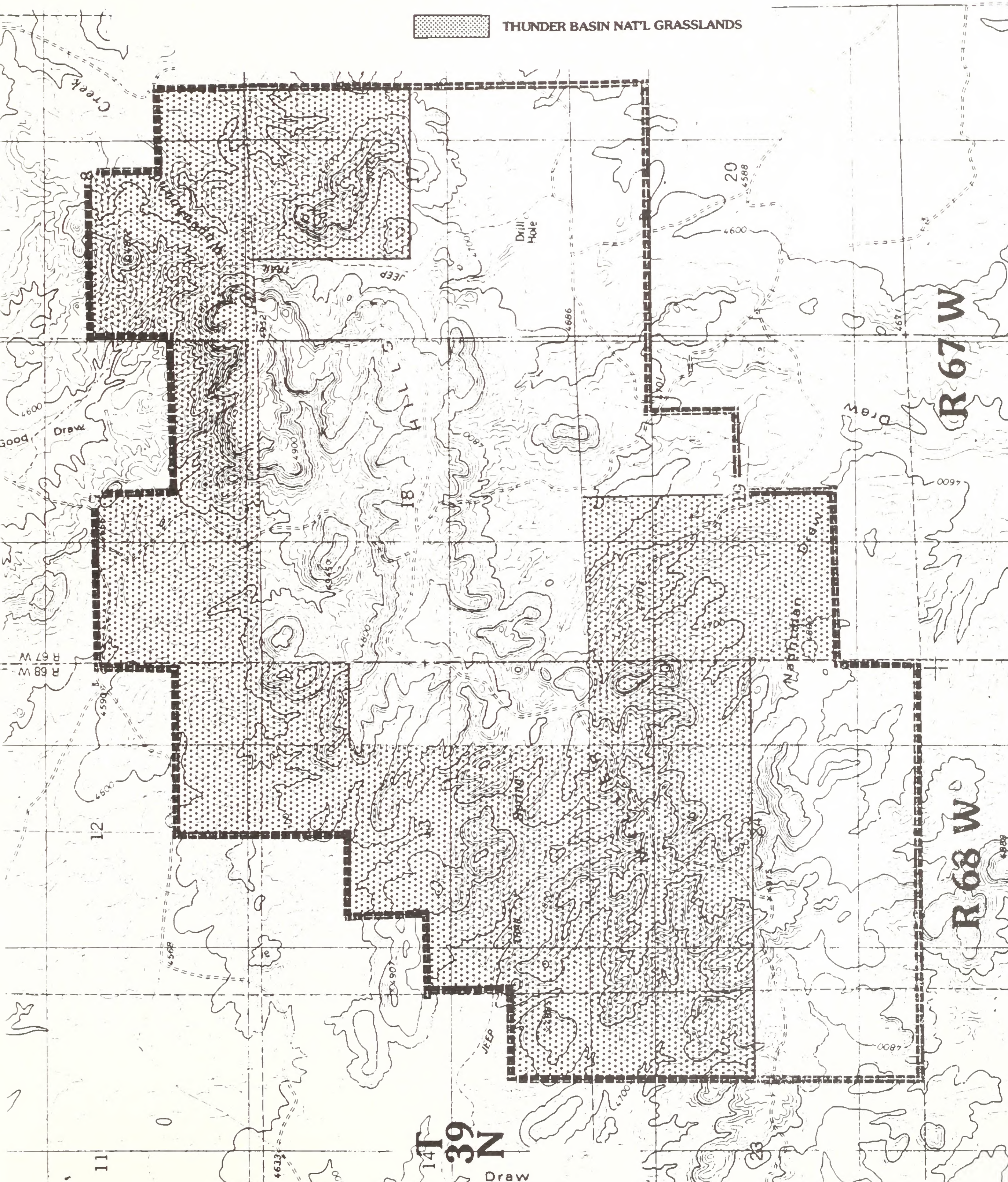
Livestock grazing and wildlife habitat are the primary uses in this roost area.

MILLER HILLS ROOST

Scale 1"=2000'

☐ PRIVATE SURFACE

▨ THUNDER BASIN NAT'L GRASSLANDS



Wildlife Resources

Both bald and golden eagle use this roost. Virtually the same wildlife species that inhabit the North Fork Cheyenne River roost can be found here. Like the draws in the North Fork Cheyenne River roost area, water is available only when it rains or when snow is present, so the variety of wildlife species is limited.

Geologic Setting

The roost area is in the south-central portion of the Powder River Basin. The geology of this basin was described previously for the Pine Ridge roost and is basically the same in this area. One exception is that the orange tops of the Miller Hills rise sharply out of the surrounding prairie. These are apparently held up by a resistant cap of orange clinker. The clinker, or scoria, resulted when burning coal seams fused and baked the overlying shales, clays, and sandstones.

Mineral Resources

Mining claim records dated February 19, 1991 were checked, and there are no active mining claims within the boundaries of the roost area. There are no documented occurrences of locatable minerals within the roost area.

The closest coal field to the roost area is Lost Springs Coal Field to the south. However, there may be some small potential for coal occurrence because the Fort Union Formation, an important coal-bearing formation, is present in the area.

There are no contracts or permits issued for the sale of mineral materials in the roost area. The potential for occurrence of mineral materials is very high as the Miller Hills are capped with clinker (scoria). Although it is commonly used for road base construction where it is available, it is unlikely that a mineral material sale will occur here. Sales are based strictly on demand, and demand in the area is extremely low.

The nearest oil and gas field is located approximately 5 miles to the northwest. It is a one-well field known as the Dull Field, and produces oil out of the Muddy Sandstone.

Rangeland Resources

No BLM-administered surface is located in this roost area. The federal lands in the area are administered by the USFS. The area is located in two grazing allotments. These are the Nachtman (233), leased by Nachtman Land and Livestock, and the Sadler (248), leased by Robert Stoddard. Nachtman runs sheep and cattle, and Stoddard runs cattle and horses. Season of use varies between pastures, but livestock are in each allotment throughout the year. No new range improvement projects have been identified for these allotments. Existing improvements include reservoirs, fences, water wells, and spring developments.

Soils and Vegetative Types

This area consists of rolling hills and shale uplands to steep porcellanite-capped buttes. The soils were formed in either loamy residuum derived from calcareous shale or in residuum derived from fragmented porcellanite. Soil textures are primarily loams or clay loams. Two mapping units are found in this area--the Shingle-Rock outcrop-Samday complex, 10 to 30% slopes; and, the Wiubaux-Rock outcrop-Shingle complex, 6 to 45% slopes.

The vegetative types for this area are shrub-grass and tree-grass types. The shrub-grass type is found along the major drainages, on the plains adjacent to the hills, and on the lower and mid-slopes. The tree-grass type is generally found on the upper slopes and tops of hills in the area. The major shrubs include big sagebrush, sumac, winterfat, and rabbitbrush. The grasses vary but primarily include bluebunch wheatgrass, blue grama, needle-and-threadgrass, and little bluestem. Ponderosa pine and junipers are the dominant trees. The range sites for this area are very shallow, shallow loamy, shallow clayey, and loamy in the 10- to 14-inch NP MLRA.

Land Use Capability

No substantive change in land uses is expected in this area.

BALD EAGLE NESTS

INTRODUCTION

Most bald eagles using winter habitat areas in Wyoming and Colorado return to Canada following roosting activities in these states. It has been only in the past few years that bald eagle nests have been documented in the lower North Platte River drainage, and during the 1991 season two pairs began nesting activities. Nesting activities, which consist of pair bonding and breeding, nest selection and nest building, egg laying, incubation, hatching, brood rearing and fledging, begin in early February and end in late July (USDI, BLM 1978 and WGFD, Oakleaf 1987).

Typically, bald eagle nests are located in cottonwood trees along the North Platte River or along major streams that drain into this river. Bald eagles choose these nest locations because fish are readily available and because the nest sites are secluded. Fish are the major food upon which the bald eagles are dependent for feeding their young. The dense foliage of cottonwood trees, particularly where there is a wide area of trees, conceals the nest. Bald eagles using nest habitat are very sensitive to human disturbance. Repeated human intrusion into nesting habitat can disrupt the eagles' nesting activity to the extent that bald eagle offspring do not survive, or that bald eagle pairs eventually abandon the nest.

Biological factors used to determine specific buffer zones for protection of each bald eagle nests include: the vegetative cover near the nest, the feeding areas which the eagles frequent, and the behavioral tolerances of the particular eagle pair. This analysis requires considerable field time for determination of a geographic buffer zone. Instead, 1-mile buffer zones using legal description lines were established around documented bald eagle nests.

Near bald eagle nests, BLM planning decisions provide for restrictions of land uses requiring BLM approval by way of seasonal and occupancy restrictions. On proposed actions on federal surface, or private surface-federal minerals, surface occupancy and surface disturbing activities are restricted by RMP decisions. These are implemented through application of the following stipulations on land use authorizations or oil and gas leases.

At the nest site area, this restriction applies:

> "No surface development will be permitted on the following nesting areas for bald eagles."

In the nest buffer area, the following restriction applies:

> "No surface development will be allowed from February 1 through August 15."

Careyhurst Nest

This Careyhurst nest is located near the North Platte River in west-central Converse County, approximately 12 miles east of Glenrock, Wyoming. The site is in T. 33 N., R. 73 W., near Boxelder Creek (map 14).

The nest area is in an alluvial river valley near the confluence of Boxelder Creek and the North Platte River. As such, it is in a riparian area, but it is bordered on both sides by drier rolling hills typical of this part of the Powder River Basin. Boxelder Creek is a perennial stream draining into the south side of the North Platte River, approximately ½ mile northeast of the nest. Elevations range from over 4,940 feet above sea level at the nest area to approximately 4,900 feet above sea level at the river.

The Careyhurst nest and most of the surrounding land is located on private surface. The legal description of the nest buffer area is listed in appendix K. There is no public land within a 2-mile radius of the nest site. A small parcel of state land is within 1-mile of the nest site. Federal minerals underlie much of this land. Land and mineral ownership at this nest is listed in appendix L. Neither legal access nor existing roads are available to this nest.

Livestock grazing, and irrigated and dryland pasture are the primary land uses in the area of this nest. None of the land within a 2-mile radius of the nest area is part of a BLM grazing allotment. Small homesteads are present along the river, and one is near the nest.

The nest is associated with the North Platte River and has the wildlife species described for that habitat.

Geologically, the area is on the southern end of the Powder River Basin. This is a large northwest to southeast-trending intermontane basin between the Big Horn Mountains on the west and the Black Hills uplift on the east. The Powder River Basin is known for its deposits of coal, oil and gas, and uranium.

Specifically, the primary geologic formation present at the surface in the area is the Quaternary age deposits of silt, sand and gravel. These sediments were probably deposited by the North Platte River, Boxelder Creek, and tributary streams and drainages.

MAP 14

Careyhurst Nest

Not Available to the Public

The geologic formations adjacent to the nest area include the Cretaceous age Lance and the Tertiary age Fort Union formations.

Mining claim records were checked, and there are no claims located on the property. There are no known locatable minerals on the parcel. The potential for occurrence of salable minerals, such as sand and gravel, is high due to the presence of the North Platte River, its tributaries, and their fluvial depositional environments and associated sediments (sand and gravel).

The nearest oil and gas production to the study area occurs in T. 33 N., R. 75 W., in the South Glenrock Field. The field produces oil from Dakota and Muddy formations from stratigraphic traps located on the east plunge of the Big Muddy anticline (Curry 1986).

The soils in the area of the Careyhurst nest have not been mapped, and site-specific information is not available. Generally, soils along the North Platte River are very deep, well drained soils, that formed in stratified alluvium derived from mixed sources. The slopes are usually very gentle, between 0 and 6%. Runoff is usually slow, and the hazard of water erosion ranges from slight to moderate. The hazard of wind erosion ranges from moderate to severe.

The soils of the upland areas adjacent to the river are varied. Most were probably formed in alluvium, residuum, or from eolian deposits derived from sandstone, shale, or other sedimentary rock. The soils range from shallow to deep, and most have either a loamy or sandy texture. Some clayey or clay loam textured soils may also be present. The hazard of water and wind erosion for these soils probably ranges from moderate to severe.

The area is mainly a sagebrush-grass vegetative type. The principle shrubs are big sagebrush, silver sagebrush, and rabbitbrush. The grasses vary, but include western wheatgrass, needle-and-threadgrass, prairie junegrass, blue grama, threadleaf sedge, and little bluestem. Cottonwood trees, various shrubs, and grasses can be found on the floodplains of the North Platte River and Boxelder Creek. The major range sites are loamy, shallow loamy, sandy, sands, and shallow sandy. Some shallow clayey sites may be present. Lowland and overflow sites can be found directly along the North Platte River. All range sites are in the 10- to 14-inch NP MLRA.

No change in land use is expected near the nest.

Rawhide Nest

The Rawhide nest is on the North Platte River in central Goshen County, approximately 1½ miles southwest of Lingle, Wyoming. The site is in T. 25 N., R. 63 W. (map 15).

The nest area is in the alluvial valley of the North Platte River. As such, it is a riparian area and is bordered by low, relatively flat-topped terraces to the south, and flat-lying floodplains to the north. Both the flat-topped terraces and the floodplains bordering the river area are heavily farmed.

MAP 15

Rawhide Nest

Not Available to the Public

The Rawhide nest is located on private surface, although federal and state land is present within a 1-mile area around the nest. The legal description of the nest buffer area is listed in appendix K. Federal minerals underlie the federal lands and some of the private lands. The federal lands include 200 acres of BLM-administered lands; 80 acres are lands administered by the BOR, and 80 acres are lands administered by the Department of Energy, Western Area Power Administration. The NE¼SW¼ of section 25, T. 25 N., R. 63 W., is withdrawn for use as a ditch rider's residence related to maintenance of the Fort Laramie Canal. Land and mineral ownership of this nest is listed in appendix L. The BLM land is one of ten riverfront parcels downstream of Casper. State lands adjoining the federal lands on the east were acquired by the WGFD, and are part of the Rawhide wildlife management unit.

A Goshen County road crosses the public lands and provides legal public access to the nest buffer area.

Wildlife habitat is the dominant land use in the Rawhide nest area. Public lands in the area, in conjunction with the WGFD's management unit, provide good habitat for upland game birds (primarily pheasants released by the state) and waterfowl. Hunting is seasonal. BOR and Western Area Power Administration lands also add to the land base available as wildlife habitat.

The Western Area Power Administration land in the SE¼NW¼, section 25, T. 25 N., R. 63 W., is occupied by the old Lingle Power Plant, which has been dismantled. Several of the old structures that remain include the power plant building, penstocks that transported water from the Fort Laramie Canal to the plant, a switchyard, and related power lines. The NE¼SW¼, section 25, T. 25 N., R. 63 W., is used as a ditch rider's residence and for gravel storage site in maintenance of the canal. The Fort Laramie Canal traverses the parcel, and a large concrete spillway extends from the canal across the county road to the Western Area Power Administration lands.

The Careyhurst nest is associated with the North Platte River and has the wildlife species described for that habitat.

Geologically, the site is southeast of the Hartville uplift and on the northwestern margin of the Denver-Julesburg Basin. The primary surface exposure of rocks in the area include Quaternary floodplain deposits of silt, sand, and gravel found along the North Platte River. Rocks present adjacent to the floodplain deposits are primarily from the Tertiary White River Formation.

Mining claim records were checked, and there are no claims located on the property. As at the Careyhurst nest, there are no known locatable minerals on the property, but the potential for occurrence of salable minerals is high.

The nearest oil and gas production to the study area occurs at the Torrington Field, south of the town of Torrington, Wyoming. The field produces oil from the Lower Cretaceous "J" Sandstone.

Near the Rawhide nest, BLM-administered lands are in the North Platte grazing allotment (10078). The type of livestock use is cattle, and it occurs during the winter. No range improvements exist or are being planned on the public land at this time.

The soils in the area of the Rawhide nest are described in the Soil Survey of Goshen County, Wyoming, Southern Part (USDA, SCS 1971). Generally, they are deep, well drained, and nearly level to gently sloping soils on the floodplain of the North Platte River. Some of the soils south of the river are gullied lands with steeper slopes. The soils are loamy fine sands, sands, or fine sandy loams. Most of the soils formed in sandy alluvium or wind-blown sands. The hazard of water erosion for the soils along the river is slight to moderate, and the hazard of wind erosion is severe. On the gullied lands the hazard of water erosion is severe. The major mapping units are: Bankard loamy fine sand, 0 to 3% slopes; Bankard loamy fine sand, 3 to 6% slopes; Bayard and Otero fine sandy loams, 0 to 3% slopes; Mixed alluvial land; Gullied land; and Otero fine sandy loam, 3 to 6% slopes (appendix I).

Much of the land located ½-mile away from the river is under cultivation. The crops include wheat, sugar beets, and alfalfa.

The vegetative type of the rangeland areas is mainly grassland, with some woody plants present. The principle grasses are needle-and-threadgrass, western wheatgrass, blue grama, prairie sandreed, threadleaf sedge, bluestem, and prairie junegrass. The major shrubs are silver sagebrush, sand sagebrush, and wild rose. Cottonwood trees are present on the floodplain of the North Platte River. The principle range sites are sandy lowland, sandy, and shallow sandy in the 12- to 14-inch precipitation zone in the Southern Plains MLRA.

No change in land use is expected at the nest site. Because this parcel provides habitat for, and hunting of, upland game birds and waterfowl, additional development in support of these uses is likely. Discussions with the WGFD indicate they may be interested in acquiring federal lands on the North Platte River for inclusion in the Rawhide unit. Those lands are identified in the RMP for lease or disposal under the R&PP Act, and could be developed to improve public access to, and use of, the river. Developments to provide camping, picnicking, and other recreational uses are possible.

BALD EAGLE FEEDING HABITAT AREAS

INTRODUCTION

During their winter stay in the North Platte River drainage, bald eagles leave the roosts at dawn for feeding areas. Two major types of feeding areas are: the North Platte River, where the eagles feed mostly on fish and waterfowl; and, the rangelands, where the eagles feed mostly on carrion. Feeding activities include frequent perching to look for prey, and soaring--especially on windy days. After feeding, the eagles return to roosts in early to late afternoon.

Of all habitat areas, bald eagles are least sensitive to human disturbances while feeding, which may explain the apparent lack of concern displayed by bald eagles when feeding on carrion along high-traffic roadways. However, this habitat is crucial to the survival of bald eagles using roosts and nests in the PRRA.

NORTH PLATTE RIVER

Along the North Platte River landownership is mostly private, with the exception of BLM's Trapper's Route landings (nine riverfront parcels upstream of Casper), the ten riverfront parcels downstream of Casper, the WGFD's acquired fishing access lands, and some state school sections. Guernsey and Glendo state parks are mostly BOR lands managed by the Wyoming Department of Commerce, Division of Parks and Historic Sites. Natrona County manages BOR lands at Gray Reef Dam. The Trapper's Route landing parcels are withdrawn as part of the North Platte River protective withdrawal, which segregates them from operation of the mining law, and precludes disposal of the federal lands. The BOR lands are also withdrawn, and mostly segregated from operation of the mining laws. Most river feeding habitat areas can be found on map 16.

Access to and along the river upstream of Casper is via Wyoming Highway 220 and several county roads. Numerous roads and trails provide access to the Trapper's Route landings, the WGFD lands, and the county facilities at Gray Reef. Downstream of Casper, access is primarily from U.S. Highway 20-26 and a network of state and county roads. Many other roads and trails that provide public access along the river and into specific sites have been acquired by the WGFD.

Recreation is the primary land use on federal lands along the river. Private and state lands also support recreation uses and host a variety of agricultural uses. These include irrigated crops, irrigated and dryland pasture, and livestock feeding. Several towns are along the river, and associated with these are residential, commercial, and some industrial uses. Most notable of the industrial facilities are the oil refineries in Casper and the Dave Johnston Power Plant near Glenrock. Sand and gravel extraction is the most common commercial use along the river. Wildlife habitat is present on all of the lands along the river. Deer and antelope are commonly seen feeding in the irrigated hay fields. Fishing, camping, picnicking, and boating and canoeing are the main recreational pursuits. Casual uses include photography, birdwatching, and sightseeing. Some commercial use is present, mostly along the highway. Ranches and "suburban" residences are also present.

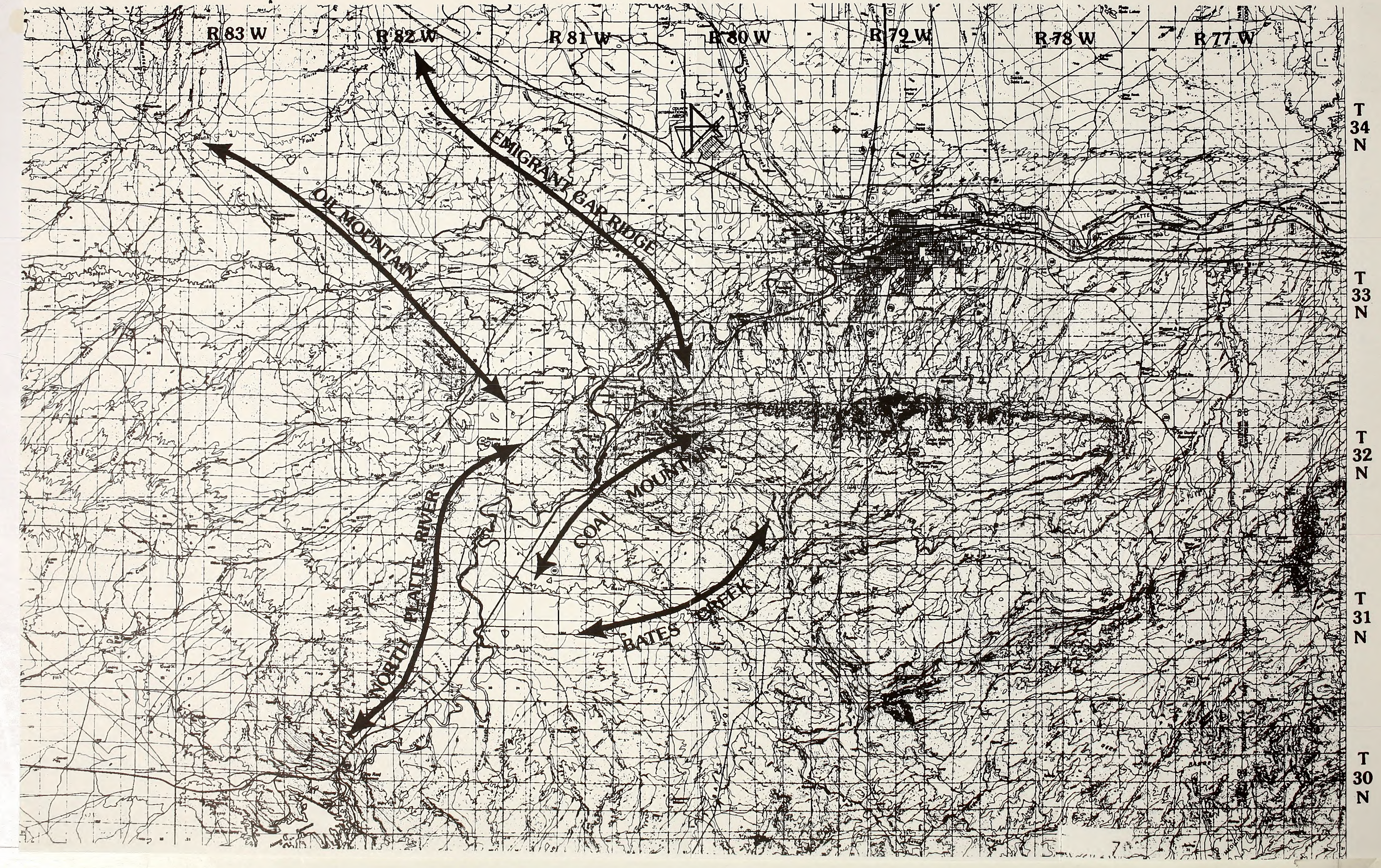
The North Platte River feeding area is a narrow (½-mile to 1-mile wide) riparian zone with cottonwood trees as the dominant vegetation type. Major wildlife groups besides the bald and golden eagles are waterfowl, game, big game, raptors, non-game birds, and non-game mammals.

The public lands in the feeding areas are part of numerous grazing allotments. Public land allotment numbers and operator names can be identified for specific locations within the feeding areas using the grazing records at PRRA. The type of livestock use varies, and includes cattle, sheep, and horses on a seasonal and year-round basis. In addition to livestock grazing, some of the private lands in the allotments along the North Platte River and its major tributaries are under cultivation, with alfalfa being the principle crop.

Very few rangeland improvement projects are being planned on public land in the allotments found in the feeding areas along the North Platte River. Fences, reservoirs, water wells, water pipelines, and spring developments are the types of range improvement projects being considered on public land in the rangeland feeding areas. No sagebrush control projects are being planned in these areas at this time; however, they could be considered in the future. It

BALD EAGLE FLYWAYS

MAP 16



is unknown what kind of projects are being planned on the private and state lands in these areas. Existing range improvements on these lands include fences, reservoirs, water wells, and spring developments.

The soils found in the feeding areas are quite varied, and it is not practical to describe in detail all of individual soil mapping units that are present. Complete descriptions for these soils can be found in the Classification And Correlation Of The Soils Of The Natrona County Area, Wyoming (USDA, SCS 1986) and the Soil Survey of Converse County, Wyoming, Northern Part (USDA, SCS 1983). Copies of these publications can be found in either the Natrona County or Converse County SCS District Offices or at the BLM, PRRA office. A soil survey has not been completed for the southern half of Converse County, which includes the North Platte River, and site-specific soil information is not available.

The vegetation in the bald eagle feeding areas varies widely with varying soil types, topography, and moisture conditions. The predominate vegetative type is sagebrush-grassland. However, in the eastern part of the area, downstream from Casper, some of the vegetative types are almost pure grassland. The majority of the plant communities or range sites found in this area are in the 10- to 14-inch precipitation zone, in either the HPSE or NP MRLAs.

The majority of the rangeland feeding areas are on upland sites that have sagebrush or other shrubs growing on them. The grasses vary but commonly consist of needle-and-threadgrass, western wheatgrass, Sandberg bluegrass, prairie junegrass, blue grama, and threadleaf sedge. A variety of forbs are found on these sites.

The feeding areas along the North Platte River consist of lowland sites that are directly adjacent to the river, and upland sites that are found on associated river terraces. The lowland sites usually consist of some trees and various shrubs, grasses, and forbs. The most common trees are cottonwood, silver buffaloberry, Russian olive, and willow. The shrubs include wild rose, rabbitbrush, greasewood, silver sagebrush, big sagebrush, and snowberry. Grasses include western wheatgrass, bluegrass, green needlegrass, needle-and-threadgrass, basin wildrye, and Canada wildrye. The forbs include a variety of plants such as scurf-peas, penstemons, milkvetches, and asters. The upland sites along the North Platte River are similar to those found in the rangeland feeding areas.

No significant change in land uses is expected. Recreation use will likely increase in terms of the number of users and the variety of activities. Some increase in recreational developments can be expected.

Petes Draw and Ledge Creek

The Petes Draw and Ledge Creek parcels lie along the North Platte River in the southeastern portion of Natrona County, approximately 3½ miles northeast of Alcova Reservoir. The parcels are located in the N½SE¼, section 8, and the S½SE¼, section 9, T. 30 N., R. 82 W.

The feeding areas, two 80-acre parcels bisected by the North Platte River, are in the alluvial valley of the river. The alluvial valley here is relatively narrow (about 1 mile) and is bordered on each side by gentle foothills and ephemeral stream drainages. Elevations of the parcels range from 5,420 feet to 5,300 feet above sea level.

Petes Draw is a small parcel that forms part of a larger federal land parcel. Private lands adjoin it on the east and south. This parcel is Trapper's Route Landing no. 1, one of nine riverfront parcels between Gray Reef Reservoir and Casper designated for recreation use and management. Part of this parcel is also withdrawn under Executive Order 6025 as a public water reserve, which segregates the land from mining and disposal.

Ledge Creek is an isolated parcel of federal land, and is Trapper's Route Landing no. 2. It is surrounded by a state land section on the south, and private lands on all other sides.

Legal public access to the Petes Draw parcel is available from the Gray Reef Road (Natrona County Road 412). BLM has developed roads and trails through this parcel that provide access to the river for boat launching and landing.

Ledge Creek has neither legal nor physical access. It is essentially isolated from the available access roads by the river.

Generally, these parcels are on the northeasterly dipping limb of a northwest- to southeast-trending anticline. The anticline plunges to the southeast, and the crestal axis crosses the North Platte River about 0.3 mile southeast of Alcova Dam (Burford 1986).

Specifically, the feeding areas are on Quaternary alluvial sediments of unconsolidated silt, sand, and gravel deposited by the North Platte River and its tributary drainages. As a result, the potential for this resource occurring in commercial quantities here is very high.

There are no mining claims presently staked on either of the parcels, and the potential for locatable minerals is probably low. The exception is bentonite due to the presence of the Cretaceous Frontier Formation--a primary bentonite-bearing formation in this area.

The nearest oil and gas production is from Schrader Flats Oil Field in T. 31 N., R. 82 W. Schrader Flats is a structural trap and produces oil from the Muddy, Lakota, and Canyon Springs sandstones (Burford 1986).

No substantive change in land use is anticipated or planned. The WGFD and Natrona County Parks Department have tentatively proposed development of a new boat launch on the Petes Draw parcel. However, first indications are that the parcel lacks a suitable ramp site. Overnight camping has recently been reported as a problem for the parks department. The county maintains this site (as well as all the Trapper's Route landings) under a cooperative management agreement. However, they are unable to recoup their costs since they cannot charge the standard camping fee on public lands. A change in availability of this parcel for camping is being considered.

Ledge Creek is undeveloped and likely to remain that way due to access limitations. No change in use is planned or is likely to occur.

Government Bridge, Bolton Creek, Clarkson Hills, and Gray Cliff

These feeding areas are on the North Platte River, approximately 6 miles north of Alcova, Wyoming, in:

T. 31 N., R. 82 W.,
  section 11, SE¼NW¼, SE¼SW¼ (Clarkson Hill);
  section 14, W½NW¼, SE¼NE¼ (Clarkson Hill);
  section 23, NE¼SE¼ (Government Bridge);
  section 24, S½SE¼ (Bolton Creek);
  section 25, W½NE¼ (Bolton Creek);
T. 32 N., R. 82 W.,
  section 25, SE¼NE¼, W½SW¼, NE¼SW¼ and NW¼SE¼ (Gray Cliff).

Here, the North Platte River lies in a broad alluvial river valley, ranging from approximately 1 mile to 3 miles wide. Topographically, the area ranges from relatively flat alluvial floodplains to rolling foothills with incised ephemeral drainages. The topography at the Gray Cliff site is somewhat different than the others. There, the North Platte River makes a tight meander that abuts a 100-foot high cliff.

Elevations across the area range from approximately 5,500 feet to 5,260 feet above sea level.

The Government Bridge parcel is part of a larger federal land parcel, with federal land on the south and west, and private land to the north and east. This is Trapper's Route Landing no. 4. It is withdrawn as part of the Bates Hole stock driveway.

The Bolton Creek area is Trapper's Route Landing no. 3. It is part of a larger federal parcel, with private lands on the north, south and west. The parcel is withdrawn as part of the Bates Hole stock driveway.

The Clarkson Hill area is part of a very large federal land complex. The parcel is part of Trappers Route Landing no. 5. Private land is intermingled with the federal land, but it is mostly to the east across the river.

Gray Cliff is Trapper's Route Landing no. 6, and it is part of the same federal land complex as landing no. 5. A state land section adjoins this parcel on the south, and private lands adjoin it on the east.

Wyoming Highway 220 and Bolton Creek Road (Natrona County Road 404) provide access to the Government Bridge parcel. BLM has developed a parking lot and a boat ramp.

Legal access to Bolton Creek is available from the Bolton Creek Road (Natrona County Road 404). BLM has developed roads and trails extending through this parcel that provide access to the river for boat launching and landing.

Clarkson Hills is accessed by the Trapper Road (Natrona County Road 316). Trails have also been developed to access the river.

Legal access is available to the Gray Cliff parcel from the Trapper Road (Natrona County Road 316), but physical access from the county road to the river is limited.

In these feeding areas, the primary surficial geologic strata are Quaternary silts, sands, and gravels deposited by the North Platte River and its tributary drainages. The geologic formations present at the surface on the periphery of the alluvial river valley include, from youngest to oldest, the Cretaceous age Lance, Lewis, Mesaverde, Steele, and Niobrara formations.

The potential for occurrence of sand and gravel mineral materials is very high within the alluvial valley of the North Platte River. Many of the best deposits of sand and gravel in Natrona County are within this depositional environment. The BLM issued a contract (WYW93767) to mine mineral materials for the S½SW¼NE¼ and N½NW¼SE¼, section 11, T. 31 N., R. 82 W., in June 1986. The area has not been mined in several years, and the contract expired in June 1991.

There are no mining claims staked on the parcels, and the potential is low. The nearest oil and gas production is from the Schrader Flats Oil Field, located in the southern portion of T. 32 N., R. 82 W. Schrader Flats is a structural trap producing from the Muddy, Lakota and Canyon Springs formations (Burford 1986).

No substantial change in use of the Government Bridge parcel is planned. Improvement of exiting facilities will continue. The Wyoming Highway Department is reconstructing the access approach to this parcel from Wyoming Highway 220. Livestock trailing will continue on the stock driveway.

On the Bolton Creek parcel, improvement of existing facilities and development of additional camping facilities are the only anticipated changes in land use. Recent improvements in one of the site's access roads was accomplished as a joint venture between BLM, Natrona County Road and Bridge Department, and a local landowner. The Bolton Creek parcel will continue to be used as part of the Bates Creek stock driveway.

The Clarkson Hills parcel has potential for development of additional facilities, although none are planned. Maintenance by the county is expected to continue under the cooperative management agreement.

No change in land use is anticipated on the Gray Cliff parcel. It has limited access and development potential due to steep cliffs along the river bank.

Bessemer Mountain and Bessemer Bend

These feeding areas are along the North Platte River in southeastern Natrona County, approximately 1 to 1½ miles southwest of Goose Egg. The public land is located in:

T. 32 N., R. 81 W.,
section 3, SE¼NW¼ (Bessemer Bend - 5 acres);
section 15, SW¼SW¼ (Bessemer Mountain);
section 22, W½NW¼, NW¼SW¼ (Bessemer Mountain).

These feeding areas are in the alluvial valley of the North Platte River at Bessemer Bend, and the steep eastern-facing sidehills of Bessemer Mountain. Here, the North Platte River flows northward through a narrow canyon known locally as "The Narrows" on the eastern end of Bessemer Mountain. The canyon separates Bessemer Mountain on the west from Coal Mountain on the east. According to Curry (1986), "the canyon is a major reason why the Oregon Trail had to cross the North Platte River at Fort Caspar so that wagon traffic could go out around the west end of the mountain."

Elevations of the parcels range from a high of approximately 5,600 feet above sea level at Bessemer Mountain to a low of approximately 5,180 feet at the Bessemer Bend site.

The Bessemer Mountain parcel is the river frontage at Bessemer Mountain, and is part of a large federal land parcel. A state land section is intermingled with the federal land, and private land surrounds the mountain. This parcel is Trapper's Route Landing no. 7.

The Bessemer Bend area is a small land parcel of 6.15 acres acquired by BLM to develop the Bessemer Bend Historic Site. The parcel is surrounded by private land with the exception of a small adjoining parcel acquired by the WGFD for river access. This parcel is Trapper's Route Landing no. 8.

Legal public access is not available to Bessemer Mountain. Physical access is available from the Speas Road (Natrona County Road 311) and then across private lands. Access to Trapper's Route Landing no. 7 is available only via the river.

Bessemer Bend has legal access from the Bessemer and Bessemer Bend roads (County roads 308 and 309).

Geologically, the Bessemer Mountain feeding area is on the eastern slopes of Bessemer Mountain above the North Platte River. The river flows through a narrow canyon between Casper and Bessemer mountains. The river eroded this canyon because the path of the river bed was already established when Casper Mountain was buried beneath soft, flat-lying volcanic sediments. Bessemer Mountain reflects the axis of the Casper Mountain anticline, with Speas Spring near the crest of the anticline (Curry 1986).

Portions of Bessemer Mountain are referred to as "Red Buttes." This is due to the rusty red color of the Triassic age red beds of the Chugwater Formation. The Chugwater Formation includes the Alcova Limestone which is gray and is a prominent cliff-forming formation at Bessemer Mountain.

The Bessemer Bend feeding area is downstream of the Bessemer Mountain area in a wide alluvial valley. It is between two large geologic structures, Bessemer Mountain to the south and Emigrant Gap anticline to the north. Quaternary age alluvial silt, sand, and gravel is the primary surficial geologic formation at this locality.

Other geologic formations present at Bessemer Mountain and Bessemer Bend include, from youngest to oldest, the Cretaceous age Cody Shale, Frontier and Mowry formations, and the Jurassic Morrison and Sundance formations.

Mining claim records for these areas were checked, and there are no claims staked on either parcel. There may be some potential for locatable minerals due to the presence of the Frontier Formation, one of the principle bentonite-bearing formations in this area.

Interest in this area for mineral materials is very high due to the presence of Alcova Limestone. The formation is much sought after as a source of aggregate material due to its durability and fracturing characteristics.

The nearest oil production is at Iron Creek Oil Field, in the northeastern portion of T. 32 N., R. 82 W., just west of Bessemer Mountain. Iron Creek Oil Field is a structural trap producing oil from the Dakota Formation.

Bessemer Mountain has limited oil and gas development potential due to topographic constraints and access limitations. No change in use of the parcel is proposed. The state land on the north side of Bessemer Mountain has limestone deposits in minable quantities. This limestone has been the source of recent public controversy over mining in this area and in the ACEC.

Further development of the Bessemer Bend parcel is unlikely. Maintenance by the county should continue. Representatives of the pipeline industry have proposed to install oil boom anchor points on both sides of the river at this site. The site has good access, and in the event of an oil spill into the river, the oil booms would aid in trapping and removing oil. However, some concern has been expressed over the utility of this site for an oil boom since water velocities are higher than expected. The WGFD has indicated they plan to build a boat ramp on their land adjoining the public land. This would replace an old steel landing mat.

Emigrant Gap Ridge

The Emigrant Gap Ridge feeding area is on the northwest side of the North Platte River in south-central Natrona County, approximately 4 miles southwest of Casper, Wyoming. The parcel is in the SE¼SE¼, section 25, T. 33 N., R. 81 W..

Generally, the area is made up of steep ridges, deeply incised drainages, the North Platte River, and the valley through which it flows. The parcel consists primarily of a low, lobate terrace and foothills above the North Platte River.

Elevations range from 5,180 feet above sea level at river level to approximately 5,380 feet above sea level at the highest point of the feeding area.

The Emigrant Gap Ridge parcel is part of a large, solid-blocked federal land parcel extending along Emigrant Gap Ridge. A state land section abuts the parcel on the south, with private land to the east. This is Trapper's Route Landing no. 9. This parcel has no legal access other than from the river.

Generally, the study area is located on the southern end of the Emigrant Gap anticline, which forms a prominent northwest- to southeast-trending ridgeline.

The anticline is long and narrow, extending approximately 20 miles to the northwest before it plunges out east of Pine Mountain (Beck 1985). The anticline abuts Casper Mountain to the south in the vicinity of Goose Egg, where it is overridden by the western end of Casper Mountain (Burford 1986). In addition, the anticline is asymmetric to the southwest and is faulted in this area on both the northeast- and southwest-dipping flanks by northwest-trending thrust faults (Burford 1986).

Geologic formations present in or near the study area, from youngest to oldest are the Cretaceous age, Frontier and Mowry formations, the Jurassic Morrison Formation, and the Sundance Formation. The Sundance Formation is found at the core of the anticline and may be found at the surface in the study area.

Mining claim records were checked, and there are no active claims on the subject parcel. However, there are claims nearby, which were probably located for purposes of mining bentonite since the Frontier Formation is one of the principle bentonite-bearing formations in the vicinity.

There does not appear to be significant sources of mineral materials such as sand and gravel within the subject parcel; thus, the potential is low.

There may be potential for accumulations of hydrocarbons somewhere within Emigrant Gap anticline due to the structure of the area. However, several wells have been drilled on it, and no discoveries have been made.

No significant changes in land use are expected in this area. The area does function as a crossing point for utility corridors, and additional lines can be expected. A right-of-way application for reconstruction of the Zero Road near the Poison Spider ORV area is pending. Bentonite mining will continue as will ORV use in the Emigrant Gap area.

Big Muddy and Parkerton

These feeding areas are located in the alluvial valley of the North Platte River in east-central Converse County, approximately 4 to 7 miles west of Glenrock, Wyoming. The parcels are located in:

T. 34 N., R. 76 W.,
section 31, SW¼ (Big Muddy);
section 34, SE¼SE¼ (Parkerton).

The river flows through a portion of both parcels. As such, the parcels are riparian zones, but they also include portions of the drier rolling uplands and stabilized sand dunes typical of this part of the Powder River Basin. The alluvial valley at this locality is about 1 to 1½ miles wide, and is bordered on both sides by gently rolling foothills and ephemeral drainages.

Elevations range from 5,120 feet above sea level at Big Muddy to 5,000 feet above sea level at Parkerton.

The Big Muddy parcel is entirely within the Cole Creek roost area. It is an isolated parcel surrounded by state and private lands. This is one of ten riverfront parcels located downstream of Casper identified in the RMP for disposal. Disposal is limited to organizations that can maintain these lands for public use.

The Parkerton parcel is an isolated 40-acre parcel entirely surrounded by private land. It is another of the ten riverfront parcels downstream from Casper, and has been identified in the RMP for disposal.

Access to the Big Muddy parcel is within the Cole Creek roost area. Please see the access description for that roost.

In the Parkerton feeding area, legal access is available only from the river. Physical access is available via an existing trail over private land. In the RMP, BLM identified the need to acquire an access easement to this parcel. If an easement were acquired, a railroad crossing would also be needed to access this parcel.

The feeding areas are located partially within the alluvial valley of the North Platte River. As a result, the primary geological formation present is the Quaternary age alluvial deposits of silt, sand, and gravel. Geologic formations found adjacent to the study area include the Cretaceous age Cody Shale and Quaternary age windblown sand deposits (sand dunes).

Generally, the parcels are located on the southwestern margin of the Powder River Basin, a large northwest- to southeast-trending intermontane basin located between the Big Horn Mountains on the west and the Black Hills uplift on the east. There are no other significant structural features associated with the subject parcels.

There are no known occurrences of locatable minerals within these feeding areas. There are no permits, sales contracts or other federally authorized actions for the mining or removal of mineral materials (sand and gravel) within the study area. However, the potential for occurrence is very high due to the depositional nature of the North Platte River and its tributary drainages.

The general area may contain some coal seams and appears to have been mined sporadically in the past. One abandoned coal mine, the Lockett Mine, is shown on the U.S. Geological Survey (USGS) topographic map for the area. It is located in the SW¼, section 32, T. 34 N., R. 76 W., where thin coal seams in the Lance Formation may have been mined.

The area may have some potential for oil and gas accumulations, as it is located on the edge of several large oil and gas fields. These include the Big Muddy Field to the south, Brooks Ranch Field to the southwest, and South Cole Creek Field to the north. The Big Muddy parcel has been tested by drilling. In 1983 Klabzuba Operating Company drilled the 14-31 well in the SW¼SW¼, section 31, T. 34 N., R. 76 W. to a depth of 5,378 feet and bottomed out in the Cody Shale. The projected total depth was never reached due to mechanical problems. As a result, the Muddy sandstone, the primary oil-producing formation in the area, was not penetrated, and the well was plugged and abandoned.

No substantial land use change on these parcels is expected. Oil and gas production in the Big Muddy parcel will continue until the field is depleted. A right-of-way application is pending for reconstruction of U.S. Highway 20-26. Both parcels are identified in the RMP for lease or disposal under the R&PP Act, and may be developed to improve public access to, and use of, the river.

Welch

The 40-acre Welch parcel is in west-central Converse County and lies along the North Platte River, approximately 9 miles east of Glenrock, Wyoming. The parcel is located in the SW¼SW¼, section 2, T. 33 N., R. 74 W.

This feeding area is situated in the alluvial valley of the North Platte River, with portions of the 40-acre tract located on both sides of the river. As such, the parcel is in a riparian area, but it is bordered on both sides by drier rolling hills typical of this part of the Powder River Basin. Little Sand Creek, an ephemeral tributary to the North Platte River, drains into the north side of the river just east of the parcel.

The Welch area is another isolated 40-acre riverfront parcel. State lands adjoin it on the south, with private lands on the other sides. Legal access to this parcel is available only from the river. Physical access is available to within ¼-mile via existing trails across private land. Beyond that, no road or trail exists. In the RMP, BLM identified the need to acquire an access easement to this parcel.

Generally, the area is on the southern end of the Powder River Basin, known for its deposits of coal, oil and gas, and uranium.

Specifically, the parcel is located in the alluvial valley of the North Platte River. The primary geologic formation present at the surface is the Quaternary alluvium consisting of silt, sand, and gravel deposits. These sediments were probably deposited by the North Platte and its tributary streams and drainages.

The geologic formations adjacent to the North Platte in the vicinity of the feeding area include the Cretaceous age Lance and the Tertiary age Fort Union formations.

Mining claim records were checked, and there are no claims located on the parcel. There are no known locatable minerals.

The potential for occurrence of salable minerals, such as sand and gravel, is high due to the presence of the North Platte River, its tributaries, and its fluvial depositional environments and associated sediments (sand and gravel).

The nearest oil and gas production occurs in T. 33 N., R. 75 W., in the South Glenrock Field. The field produces oil from the Dakota and Muddy formations from stratigraphic traps located on the east plunge of the Big Muddy anticline (Curry 1986).

An oil well was drilled in 1951 immediately north of the parcel by Phillips Petroleum Company. The well, Number 1 Tank Farm, was located in the NW¼SW¼, section 2, T. 33 N., R. 74 W. It was drilled to a depth 9,895 feet where it penetrated the Chugwater Formation. Several horizons were tested, including the Frontier and Muddy formations and found to be barren. The well was plugged and abandoned.

The remains of a large oil storage area or tank farm are located north of and immediately adjacent to the feeding area. Only the circular dikes that surrounded the oil tanks and the water tower of the facility are now left.

No change in land use is expected. This parcel is identified in the RMP for lease or disposal under the R&PP Act, and may be developed to improve public access to, and use of, the river.

Gedney Draw and LaBonte

These parcels are located on the North Platte River in central Converse County, approximately 4 to 6 miles south of Douglas, Wyoming. The parcels are located in:

T. 31 N. , R. 71 W.,
section 5, NE¼SE¼ (Gedney Draw);
section 23, NE¼NW¼ (LaBonte).

The feeding areas are primarily on the alluvial valley of the North Platte River. The river valley width at both locations is less than ¼ mile. As a result, the parcels lie partially between the river valley and the steep foothills adjoining the river valley. Elevations range from 4,755 feet at river level in the Gedney Draw area to approximately 4,740 feet at river level at LaBonte; a difference of 15 feet between parcels at river level.

The elevation change in the foothills is a more dramatic 445 feet, rising steeply above the river bank. On the river, Gedney Draw is approximately 4,740 feet above sea level, while on the other side of the parcel in the foothills the elevation is about 5,200 feet above sea level.

Both parcels are part of larger federal land parcels that are surrounded by private land. They are two of the ten riverfront parcels identified in the RMP for disposal.

Legal access to the Gedney Draw and LaBonte parcels is only available from the river. Physical access is available over existing roads and trails to the Gedney Draw parcel, but only to within 1 mile of the LaBonte parcel. New construction would be needed for the remaining mile to access the LaBonte parcel. In the RMP, BLM identified the need to acquire access easements to both parcels. In May 1985, the BLM Casper District, Chief, Division of Operations and the district engineer evaluated both access easements. They recommended the access easement to the Gedney Draw parcel be dropped since the WGFD has a fishing access point on the opposite side of the river. They also recommended the LaBonte parcel access easement be dropped because construction would be very costly.

The parcels are on the southernmost end of the Powder River Basin, and near the northern foothills of the Laramie Mountain Range. The Laramie Mountains and Hartville uplift are to the south and southeast.

The geologic formations exposed at or near the parcels include Quaternary alluvial deposits, the Tertiary White River Formation, Cretaceous Frontier Formation, and the Jurassic Sundance, Morrison, and Triassic Chugwater formations.

Mining claim records for the parcels were checked, and there are no claims on the parcels. There may be some low potential for locatables on the parcels due to the presence of gypsum-bearing formations (Sundance and Chugwater formations), and the bentonite-bearing Frontier Formation.

The potential for the occurrence of salable minerals, such as sand and gravel, is low. The alluvial valley at these locations is very narrow, so deposits of mineral materials would be comparatively minimal.

The closest oil and gas production is in the Douglas South Field, approximately 5 to 6 miles north of the study area. This field is a stratigraphic trap and produces from the Cretaceous Lewis and Mesaverde formations (Pritchett 1981).

No substantive change in land use on these parcels is anticipated at this time. Both parcels have limited potential for recreational development due to steep topography and lack of access. If access were acquired, developments would likely be very modest. The public land in the Gedney Draw parcel could compliment the WGFD's fishing access by providing additional river frontage. Both parcels are identified in the RMP for lease or disposal under the R&PP Act, and may be developed to improve public access to, and use of, the river.

RANGELANDS

Landownership in the rangeland feeding habitat areas consists of intermingled federal, state, and private lands with many very large private and federal land blocks, and generally smaller state land blocks. Small, scattered federal and state parcels are present with increasing frequency as you progress eastward in the resource area. Most of the federal land is managed for a full range of multiple uses. Exceptions are mostly associated with federal lands administered by agencies other than BLM.

Access throughout the resource area is provided by a network of interstate, U.S., state and county highways, and innumerable roads and trails.

The majority of rangelands are undeveloped and are used to support livestock grazing and wildlife habitat. Other than livestock grazing, recreational activities are the primary use, with hunting being the most prominent. Oil and gas and other mineral production activities are also a prominent use, but they tend to be in concentrated areas.

BALD EAGLE FLYWAYS

RESOURCE VALUES COMMON TO ALL BALD EAGLE FLYWAYS

Land Status

Ownership along all of the identified flyways is dominated by federal lands. Private lands surround the federal landS and include the major gaps between ridges. State lands are mostly school sections 16 and 36, with other scattered, smaller state land parcels also in the area.

Access

Several access routes traverse the flyways. Wyoming Highway 220 extends along the North Platte River flyway, and the Poison Spider Road and Oil Camp Road (Natrona County Road 201 and 210, respectively) traverse parts of the Oil Mountain flyway. These roads provide legal access to the public lands along and within the flyways.

Land Uses and Recreation Resources

As with the roost areas, livestock grazing and wildlife habitat are the dominant land uses along the flyways.

Three designated utility corridors extend from southwest to northeast through the area. Corridors are designated in BLM land use planning decisions under 43 CFR 2805. The North Platte River corridor extends along the North Platte River flyway between Alcova and Casper, generally parallel to the river. This corridor contains several major power lines. Also present, but not confined to the corridor, are Wyoming Highway 220, the Casper Canal, several county roads, and numerous smaller roads and utility lines. The Oregon Trail corridor extends from near Pathfinder Reservoir to Casper along the Oregon Trail county road. This corridor contains several major oil and gas pipelines, the county road, and other roads and utility lines. The third corridor extends from near Pathfinder Reservoir to Casper, and also parallels the Oregon Trail road, but is approximately 1 mile to the northwest of the county road. This is a newly designated corridor hosting a single major power line. Major power lines are the primary concern between corridors and flyways. The problem is one of raptor collisions where birds fly into overhead ground wires on these major lines. Often the birds are able to see and avoid the electrical conductors because of the relatively large size. However, the ground wires are small and do present a visibility and thus a collision problem. In addition, the smaller powerlines near or crossing the North Platte River could pose collision hazards to eagles.

Wildlife Resources

The flyways are ridges with pine stands. Many of the species described for the Jackson Canyon ACEC would be present. Since the North Platte River is within the flyways, there are also fisheries present.

Very little has been written about bald eagle use of flyways in east-central Wyoming. Eagles have been observed traveling above the ridges between roosts and feeding areas. It is believed that updrafts caused by the prevailing southwest winds against these ridges allow the eagles to travel with little energy expenditure. The flyways include some heavily developed areas, including the Goose Egg area along U. S. Highway 220 and the Emigrant Gap area along Zero Road (Natrona County Road 201). Developments include paved highways, residential subdivisions, mining activity, and recreation use. BLM has received no reports of adverse reactions of eagles to these developments. Eagles fly from as low as 100 feet above ground level to several hundred feet above ground level in these flyways.

Rangeland Resources

The public lands in the flyway areas are part of numerous grazing allotments. Public land allotment numbers and operator names can be identified for specific locations within the flyways using the grazing records at PRRA. The type of livestock use varies, and includes cattle, sheep, and horses on a seasonal and year-round basis. In addition to livestock grazing, some of the private lands in the allotments along the North Platte River and its major tributaries are under cultivation, with alfalfa being the principle crop.

Very few rangeland improvement projects are being planned on public land in the allotments found in the flyways along the North Platte River. Fences, reservoirs, water wells, water pipelines, and spring developments are the types of range improvement projects being considered on public land in the rangeland flyway areas. No sagebrush control projects are being planned in these areas at this time; however, they could be considered in the future. It is unknown what kind of projects are being planned on the private and state lands in these areas. Existing range improvements on these lands include fences, reservoirs, water wells, and spring developments.

Soils and Vegetative Types

The soils and vegetation found in the flyway areas are generally the same as those described for the bald eagle feeding habitat areas. Please see the "Soils and Vegetative Types" section for the North Platte River feeding habitat area.

The flyway areas include both upland and lowland type sites described previously for the feeding habitat areas.

Land Use Capability

No substantive change in land uses is expected within the flyways, with the exception of corridor changes. The BLM has identified the North Platte River corridor to be phased out. At least one, and possibly two, of the existing power lines within the right-of-way on this corridor would be removed in 1991. Removing the power lines would help reduce collisions between power lines and raptors. In phasing out this corridor, the BLM has identified a new corridor 1 mile east of the Oregon Trail corridor which should reduce land use and visual conflicts along the river.

OIL MOUNTAIN FLYWAY

The Oil Mountain flyway is in central Natrona County over a northwest- to southeast-trending ridgeline extending from Oil Mountain on the southeastern end (T. 33 N., R. 82 W.) to Pine Mountain on the northwestern end (T. 35 N., R. 84 W.). The ridgeline extends nearly 22 miles to the northwest, where it terminates at the northern end of Pine Mountain (map 16).

Topographically, the ridgeline presents escarpments, hogback ridges, and deeply incised trellis-type drainage patterns. This kind of topography is very pronounced at the northern and the southern ends and less pronounced in the middle portion of the area.

The highest point along the trend is 6,719 feet above sea level at Pine Mountain, and the highest point at Oil Mountain is approximately 6,027 feet above sea level.

On the Oil Mountain flyway, federal landownership generally follows the ridges. The general area is mostly private ownership with a few federal parcels. The east side of Pine Mountain is not in the flyway, but does contains several very large federal land parcels.

Oil and gas development in the Iron Creek and Poison Spider oil fields is the primary intensive land use within the Oil Mountain flyway. Irrigated fields are present over large areas of private land between Bessemer Mountain and Oil Mountain, and over an extensive area between the Oil Mountain and Emigrant Gap Ridge flyways.

The Oil Mountain ridgeline, a northwest- to southeast-trending anticline is in the southeast portion of the Wind River Basin. The anticline is an upwardly convex fold, or up-bowing of the geologic strata, that formed the narrow ridgeline. The anticline terminates to the north at Pine Mountain, which is more of a dome-type structure. In places along the ridgeline, the rock strata are tightly folded, and are steeply dipping forming the hogback ridges which parallel the anticline.

This ridgeline is parallel to Emigrant Gap anticline which is approximately 8 miles east of the Oil Mountain-Pine Mountain trend.

EMIGRANT GAP RIDGE FLYWAY

The Emigrant Gap Ridge flyway is in central Natrona County, approximately 15 miles west of Casper, Wyoming. The flyway is above Emigrant Gap Ridge, extending from Casper Mountain on the south to Pine Mountain on the north (map 16).

Emigrant Gap Ridge is a northwest- to southwest-trending ridgeline. The ridge begins at Casper Mountain and extends almost 40 miles to the northwest, eventually fading out nearly 25 miles northwest of Casper, Wyoming.

Topographically, the ridgeline presents steep hogback ridges, deeply incised trellis-type drainages, and steep northeast- and southwest-facing slopes. The ridgeline is wider in the southeast where it abruptly terminates against Casper Mountain, than at the northwestern end where it eventually fades out. The southern end is also higher in elevation, 6,032 feet above sea level, than the northern end, which is approximately 5,800 feet above sea level.

On the Emigrant Gap Ridge flyway, federal land is concentrated on and adjacent to the ridge itself. Large blocks of private land are intermingled between the federal land blocks, usually in the major gaps (such as Emigrant Gap Ridge), and along the North Platte River. State lands consist of sections 16 and 36, and a few other small parcels. Part of the federal lands at Emigrant Gap are withdrawn as part of a stock driveway. The withdrawal segregates federal lands from disposal and limits mining. No surface development is permitted on the federal lands located in T. 33 N., R. 81 W., sections 13, 14, 15, 23, 24, 25 and 26 (approximately 2,640 acres) because they are closely associated with the Jackson Canyon ACEC.

Within the Emigrant Gap Ridge flyway, BLM has designated an area open to ORV use. This is the Poison Spider ORV area near the Poison Spider School. This area also overlaps with the stock driveway, which is used mostly as an overnight feeding area for livestock while trailing between summer and winter ranges. Other land uses in this flyway include the Poison Spider shooting range, a 120-acre parcel transferred by BLM to Natrona County under the R&PP Act. Suburban residences are scattered throughout much of the area on private lands adjoining the Emigrant Gap Ridge.

Geologically, Emigrant Gap Ridge is a northwest- to southeast-trending anticline much like the Oil Mountain ridgeline. However, this anticline abruptly terminates to the south against Casper Mountain and gradually plunges into the subsurface to the northwest. Although Pine Mountain is located only 5 miles west of Emigrant Gap Ridge, it is a totally separate structure and is unrelated to Emigrant Gap Ridge.

NORTH PLATTE RIVER FLYWAY

This bald eagle flyway is located over the North Platte River between Emigrant Gap Ridge at the northern end, and the WGFD's Lusbee fishing access on the southern end (map 16).

The major physiographic feature of this area is the North Platte River and its associated riparian-type environments. It does, however, include the drier rolling uplands, and dissected badlands with deeply incised drainages typical of this part of Wyoming. In addition, some portions of this flyway are under cultivation due to the availability of irrigation water along the North Platte River, and the relatively fertile alluvial valley soils.

Several other drainages and streams empty into the North Platte River in this area, including Bolton and Bates creeks. The Bates Creek drainage also supports some cultivation but not to the degree that the river does.

The North Platte River flyway includes a large area of well-blocked federal land in the Clarkson Hill area, and along the southeast-facing slopes adjoining Clarkson Hill. Large blocks of federal land are also present to the west in the Alcova Rim area, and most of the land at Bessemer Mountain is in federal ownership. A few sections of state land are present. There is a large expanse of private lands along the river, covering most of the river terrace on either side. The federal lands at Bessemer Mountain and the federally owned river frontage parcels (Trapper's Route landings) are included in the North Platte River protective withdrawal, which prohibits mining and surface disposal.

The North Platte River flyway is influenced significantly by the river and land uses associated with it. Among the recreational uses are hunting, fishing, floating, camping, sightseeing, birdwatching, as well as a variety of other uses. Agricultural developments include ranching and some farming. Much of the flat river terraces on either side of the river are irrigated as pasture land or for crop production. Hay and corn are the primary crops.

Generally, the North Platte River flyway is within an area between the Wind River Basin to the northwest, and Bates Hole and the Shirley Basin to the southeast. Bates Hole, a topographic depression carved out of Tertiary and Cretaceous formations by Stinking Creek, is located at the northern end of Shirley Basin (Debruin 1980).

The major geologic formation at the surface along the flyway is the Quaternary alluvial sediments within the alluvial valley of the North Platte River. Other formations present at the surface adjacent to the North Platte River include, from youngest to oldest, the Cretaceous Steele and Cody shales, the Frontier and Mowry formations, and the Jurassic Morrison Formation. The Jurassic Sundance and Chugwater formations are also present.

Locatable minerals such as bentonite may occur due to the presence of the Frontier Formation, one of the primary bentonite-bearing units in the area.

The potential for occurrence of salable minerals such as sand and gravel is very high due to the alluvial deposits of silt, sand, and gravel from the North Platte River and its tributaries. There are also sand and gravel pits within the flyway. BLM material sale WYW93767 (inactive) for mining and removal of sand and gravel is adjacent to the North Platte River in section 11, T. 31 N., R. 82 W. The Wyoming DEQ is in the process of using the operator's bond to reclaim the pit, and could reclaim it for recreation or wildlife (waterfowl) purposes. There are also privately owned gravel pits being operated in this vicinity.

There is potential for accumulations of oil and gas within this general area. Several oil and gas fields have been discovered, such as Schrader Flats, Spindle Top, Bolton Creek, and Bates Creek. Drilling activity continues in the general flyway area.

COAL MOUNTAIN FLYWAY

The Coal Mountain flyway is in southeastern Natrona County, approximately 12 miles southwest of Casper, Wyoming. It extends from the southeastern end of Bessemer Mountain over the western end of Coal Mountain, and into the Jackson Canyon/Little Red Creek roost at the west end of Casper Mountain (map 16).

Topographically, Bessemer Mountain on the west is separated from Coal Mountain on the east by the North Platte River. At this locality, the river flows northward through a narrow gap in the rocks known locally as The Narrows. This was a major reason wagons following the Oregon Trail crossed the river to the north at Bessemer Bend and went out around the west end of the mountain (Curry 1986).

The highest elevation at Bessemer Mountain is 6,372 feet above sea level, while the elevation at river level is approximately 5,200 feet above sea level. The highest point at Coal Mountain in the vicinity of the flyway is approximately 6,800 feet above sea level.

The Coal Mountain flyway is almost entirely over private land. One isolated parcel of federal land is present at the junction of Wyoming Highway 220 and the Coal Mountain County road (Natrona County Road 401), and two others are present along the county road. Other federal land parcels are present where the flyway enters the Jackson Canyon ACEC.

Lands near Coal Mountain within this flyway are used mostly for livestock grazing and wildlife habitat, with some lands being used for irrigated pasture and hay and corn production. Other land uses include roads and highways, commercial and residential facilities at Clark's Corner (junction of Wyoming highways 220 and 487), assorted power lines and telephone lines, and ditches and canals associated with irrigation.

Geologically, both Coal Mountain and Bessemer Mountain are considered part of the western end of the Casper Mountain anticline. Bessemer Mountain reflects the axis of the anticline which is located near the Speas Spring at river level. According to Burford (1986), the river eroded the canyon between Bessemer and Coal mountains, rather than flowing around the west end, because the river route was established when Casper Mountain was buried beneath soft Tertiary volcanic sediments.

BATES CREEK FLYWAY

The Bates Creek flyway is in southeastern Natrona County, approximately 12 miles southwest of Casper, Wyoming. It trends southwesterly from the eastern end of Coal Mountain, across Wyoming Highway 487, to and south of, Bates Creek (map 16).

Topographically, the flyway extends over mountainous terrain of steep escarpments and slopes of Casper Mountain down to the relatively flat alluvial valley of Bates Creek.

Bates Creek is a perennial stream draining eastward into the North Platte River some 6 miles distant. The Bates Creek drainage is riparian in nature, and the country immediately adjacent to the creek is used heavily for agricultural purposes. Elevations range from 6,755 feet above sea level at the east end of Coal Mountain, to roughly 5,480 feet above sea level at the Two Bar Ranch on Bates Creek.

The flyway over Bates Creek is dominated by private lands with a few scattered federal and state parcels, except where the flyway approaches the Jackson Canyon ACEC area.

The Bates Creek flyway crosses lands devoted almost entirely to irrigation and livestock grazing. Wildlife habitat is also present on much of this area. The flyway extends from the river near Government Bridge to the ACEC area, crossing Wyoming Highway 487 and the Cole Mountain County Road.

Coal Mountain is on the western end on the plunge, or nose, of the Casper Mountain anticline. The east end of Coal Mountain in the vicinity of the Bates Creek flyway is on the southward-dipping flank of the anticline. Quaternary wind-blown sand has been deposited at the base of the southwest-facing slopes of Coal Mountain. The sand deposits are approximately 2 miles wide and 5 to 6 miles long. These deposits lie parallel to the base of the mountain on the north and to the alluvial valley of Bates Creek on the south.

The Bates Creek alluvial valley here is primarily filled with Quaternary age silt, sand, and gravel deposited by Bates Creek and its tributary drainages. Other rock formations present at the surface within the flyway include the Cretaceous Cody Shale, Frontier, and Mowry formations; the Jurassic Morrison and Sundance formations, and the Triassic Chugwater Group (which includes the Alcova Limestone).

CHAPTER 3: MANAGEMENT OBJECTIVES

HMP OBJECTIVES

The PRRA RMP (1985) contains land use decisions specific to the Jackson Canyon ACEC, and to bald eagle habitat areas throughout Natrona, Converse, Platte, and Goshen counties. The RMP decisions generally state that resource management actions will be aimed at protecting significant bald eagle and golden eagle habitat. The overall objective is to manage habitats on the public lands for the conservation and improvement of wildlife resources. Specific HMP objectives are based on RMP decisions.

For all management objectives, the "maintenance" level is that described in the "Affected Environment" section of this HMP.

Further, the bald eagle population figure of 250 is an estimate. In the monitoring phase of HMP implementation, BLM will track population numbers in cooperation with the WGFD, BOR, and USFWS, and a bald eagle population figure will be calculated based on a five-year average.

JACKSON CANYON ACEC, AND OTHER RESOURCE AREA ROOSTS

Improve or maintain 37,530 acres of night-roosting habitat in a suitable condition to support known roosts, and any other roosts discovered, to meet the needs of a wintering population of 250 bald eagles in the resource area. This acreage includes federal surface lands and private surface-federal mineral lands.

FEEDING AREAS

Improve or maintain known bald eagle feeding habitat on 1,285 acres of federal surface lands along the North Platte River, and on any additional lands that may be acquired or managed through agreement along the North Platte River.

Improve or maintain known bald eagle rangeland feeding habitat in the resource area.

FLYWAY HABITAT

Manage public lands in known bald eagle flyways so that land uses do not present significant hazards to bald eagles using that flyway habitat.

NESTS AND NEST HABITAT

Maintain or improve suitable habitat (nests) for two breeding pairs of bald eagles, and any additional pairs that are discovered or become known, to the extent possible given the varied and intermingled landownerships.

OBJECTIVES SUMMARY

In summary, the public lands containing significant bald eagle and golden eagle habitat will be managed primarily for the continued protection and improvement of those habitats. The overall objective is to manage habitats on the public lands for the conservation and improvement of wildlife resources.

CHAPTER 4: PLANNED ACTIONS

INTRODUCTION

The alternatives presented here were identified after reviewing comments received from the public during the scoping period, and after reviewing existing RMP land use decisions. Many alternatives are identified to address specific proposals from the public and to provide for assessment of those proposals in the HMP. For example, in the ACEC the exchange and mineral materials alternatives include proposals made by contractors, and by landowners and grazing lessees. Other alternatives were identified using professional knowledge and judgment to address potential land uses not specifically proposed by the public. The alternatives also incorporate information received from the WGFD and FWS. Alternatives and possible actions are directed at public lands and resources administered by the BLM, PRRA.

In most cases, Alternative A reflects the land uses presently allowed by RMP decisions. Those RMP decisions outline the management actions that were found in 1985 to be in conformance with the laws and regulations directing management of bald eagle habitat, and that would not cause an adverse affect to endangered bald eagles. These findings were made in the environmental impact statement (EIS) prepared for the RMP. Where Alternative A represents decisions contained in the ROD for the RMP, the land use decision number and the ROD page number will be listed in parenthesis at the end of the alternative. The "Introduction" section explains in further detail how land use decisions are referenced.

Following public review and comment on the draft HMP, development of a new alternative to address comments, and analysis of the new alternative, a "Preferred Alternative" was identified. The preferred alternative follows the planned action alternatives outlined here. The cumulative impacts of the preferred alternative are contained in the "Environmental Consequences" section, and is entitled "Cumulative Impacts."

JACKSON CANYON ACEC

The location and acreage of bald eagle roost habitat in the ACEC is listed in appendix D. Map 3 shows the ACEC area.

RECREATION

Alternative A

ORV travel on public lands in the ACEC would be limited to designated roads and vehicle routes on 3,890 acres of federal lands within the 14,000-acre ACEC area. Designated ORV routes are those which are clearly identified on the ground by signs, with the exception of the archery range. Under this alternative, the archery range would be designated an open ORV area for snowmobiling (in accordance with the R&PP development plan for that area). Use of designated routes by ORVs would not be allowed from November 1 through March 31, except when BLM determines (on a case-by-case basis) that administrative access is necessary for fire suppression or prescribed fire actions, or for control of pine beetle infestations to maintain or improve bald eagle habitat. The ORV routes that would be officially designated through publication in the Federal Register are shown on map 17. (R2, ROD p. 26, Table 5; SD4, ROD p. 31; WL6, ROD p. 30; ROD p. 63)

Alternative B

In addition to the use restrictions outlined under Alternative A, public lands in the ACEC would be closed to all winter recreation uses by physically closing roads and trails and posting signs. Under this alternative, the archery range would be closed to snowmobiling. The ACEC would be officially designated as closed to all travel (including snowshoeing, skiing, pedestrian, equestrian, and snowmobile use) by publication of the closure in the Federal Register. The area would be actively patrolled, and fines and penalties would be used for enforcement of closure violations to ensure compliance. Summer recreation (and ORV) use would be allowed as outlined under Alternative A.

ACCESS

Alternative A

Construction of new roads or upgrading of existing roads would not be permitted on public lands within the Jackson Canyon ACEC. No authorizations would be approved for roads or other facilities located within the ACEC. Use of designated existing roads and trails could continue subject to no surface occupancy from November 1 through March 31. (SD4, ROD p. 31; ROD p. 63)

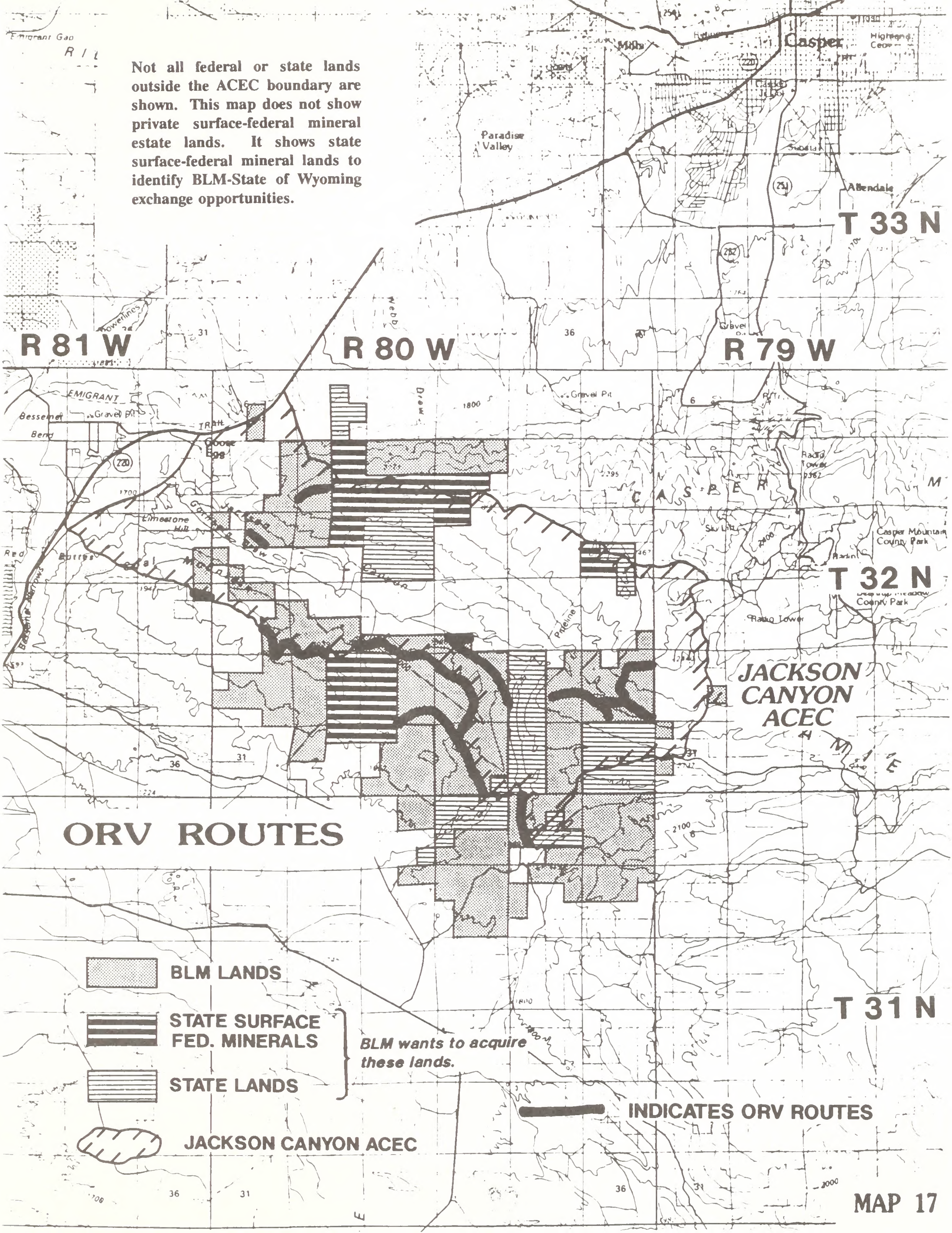
Alternative B

New authorizations for construction of new roads and other facilities on public lands (which may include BLM-authorized mineral development on private surface-federal mineral estate), and for upgrading and maintenance of existing roads on public lands (which may include private surface-federal mineral estate), within or leading directly to the ACEC will not be issued, except as specified in the following paragraph.

A 60-foot wide road to the archery range on the public land now under R&PP lease to the Girl Scouts, proposed for construction by the Natrona County Parks Department, may be authorized by right-of-way. The 60-foot width is intended to meet the requirements under state law for subdivision access, and such right-of-way will allow year-round occupancy. Stipulations in the archery range R&PP development plan will prohibit winter vehicle access on federal land beyond the archery range R&PP area.

Alternative C

On public lands, new access road construction within or leading directly to the ACEC would not be permitted. The timber harvest roads and trails located in T. 32 N., R. 80 W., section 25 would be obliterated and revegetated. Authorizations for existing roads leading to the ACEC, including the road to the archery range R&PP area, could be issued subject to no surface occupancy from November 1 through March 31, and the restriction that no road improvements or maintenance exceeding a 50-foot width would be allowed.



Not all federal or state lands outside the ACEC boundary are shown. This map does not show private surface-federal mineral estate lands. It shows state surface-federal mineral lands to identify BLM-State of Wyoming exchange opportunities.

ORV ROUTES

▨ BLM LANDS

☰ STATE SURFACE FED. MINERALS

☰ STATE LANDS

BLM wants to acquire these lands.

━ INDICATES ORV ROUTES

JACKSON CANYON ACEC

MAP 17

EXCHANGE

Alternative A

Exchange would be pursued to acquire all state of Wyoming lands within or adjacent to the ACEC; public lands located outside the ACEC area (to be identified by the state of Wyoming) would be disposed of. Some of the state lands adjacent to the ACEC that were identified during preliminary BLM-state exchange negotiations are located in sections 2, 3, and 4 of T. 31 N., R. 80 W., and in sections 28 and 29 of T. 32 N., R. 80 W. This alternative includes disposal by exchange to the state of Wyoming of 840 acres of public lands outside the ACEC boundary that contain limestone deposits (T. 32 N., R. 80 W., sections 27, 28, and 34), subject to the following restrictions on the patent. Mineral material extraction would be subject to the following restrictions. (M3, ROD p.11; ROD pp. 59, 60)

> No occupancy or surface-disturbing activity would be allowed from November 1 through March 31.
>
> Travel over all access roads or material sites would not be permitted during the restricted period. Adequate measures to control and prohibit access would be made conditions of any sale, free use permit, or land exchange.

Alternative B

Exchange would be pursued to acquire 40 acres located in the SE¼SE¼, section 34, T. 32 N., R 80 W. from the state of Wyoming; public lands located outside of the ACEC area (to be identified by the state of Wyoming) would be disposed of. Approximately 840 acres of public lands adjacent to the ACEC that contain limestone deposits would not be available for exchange to the state of Wyoming (T. 32 N., R. 80 W., sections 27, 28, and 34).

Alternative C

Exchange to acquire all state of Wyoming lands within or adjacent to the ACEC that are not leased to the Eagle Ridge Ranch Company would be pursued. Public lands located outside the ACEC area (to be identified by the state of Wyoming) would be disposed of. Those public lands adjacent to the ACEC that contain limestone deposits would not be available for exchange to the state of Wyoming (T. 32 N., R. 80 W., sections 27, 28, and 34, approximately 840 acres).

FORESTRY

Alternative A

An active commercial timber harvest on public lands, as outlined in the RMP, would be carried out within the Little Red Creek area. Selective cutting of timber stands would be undertaken on approximately 850 acres of the 1,323 acres of commercial base, with a planned harvest of approximately 3,450 thousand board feet (mbf) over a five-year period. Timber management actions would be subject to protection of the bald eagle habitat and would be prohibited from November 1 through March 31. (F2, ROD p.12; SD4, ROD p. 31; ROD pp. 59, 60)

Alternative B

The acreage and volume identified for timber harvest on public lands within the ACEC, including the 163 acres of remaining commercial forest, would be removed from BLM's commercial base. No timber would be harvested for commercial purposes from the ACEC, but it would be actively managed within the ACEC. Silvicultural practices (thinning and mountain pine beetle management) would be implemented to achieve species diversity and to obtain healthy aged and structured stands for the benefit of bald eagle roosting habitat.

FIRE MANAGEMENT

Alternative A

All federal lands within or adjacent to the ACEC would be designated priority full suppression zones. Priority full suppression may include full suppression of wildfires with all available resources, including vehicle use on existing roads and trails, air support, construction of roads, and grading of firebreaks using heavy equipment. To the extent possible, trees would not be cut within 200 yards of the roosts during fire suppression (FM3, ROD p. 11; SD4, ROD p. 31; ROD p. 60).

The BLM would pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan could be established. That plan would be used for an escaped fire situation analysis plan when needed. Prescribed burning would be implemented where necessary to meet wildlife, range, and timber resource management objectives, but it would not be allowed from November 1 through March 31. (FM3, ROD p. 11; SD4, ROD p. 31; ROD p. 60)

Alternative B

All federal lands within or adjacent to the ACEC would be designated priority full suppression zones. Priority full suppression would include full suppression of any fire with ground crews and air support upon initial attack. This could include vehicle use on existing roads and trails but not construction of roads or grading of firebreaks. To the extent possible, trees would not be cut within 200 yards of the roosts during fire suppression.

The BLM would pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan could be established. That plan would be used for an escaped fire situation analysis plan when needed. Prescribed burning would be implemented where necessary to meet wildlife, range, and timber resource management objectives, but it would not be allowed from November 1 through March 31.

Alternative C

All federal lands within or adjacent to the ACEC would be designated priority full suppression zones. Priority full suppression would include full suppression of any fire with ground crews and air support upon initial attack. This could include vehicle use on existing roads and trails but not construction of roads or grading of firebreaks except as noted below. To the extent possible, trees would not be cut within 200 yards of the roosts during fire suppression.

Use of heavy equipment to construct firebreaks and roads would be allowed in north-northeastern areas of the ACEC in T. 32 N., R. 80 W., section 7, E½E½, SW¼SE¼, section 8, W½, section 24, SE¼SE¼, and section 25, E½, (880 acres) to suppress fires presenting high risks to life and property.

The BLM would pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan can be established. That plan would be used for an escaped fire situation analysis plan when needed. Prescribed burning would be implemented where necessary to meet wildlife, range, and timber resource management objectives, but it would not be allowed from November 1 through March 31.

MINERAL MATERIALS

Alternative A

Mineral materials located on public lands outside the existing ACEC boundary would be available for extraction of limestone or other salable minerals. The mineral materials are located in T. 32 N., R. 80 W., sections 27, 28, and 34, on approximately 840 acres (map 18). These lands would be offered to the state of Wyoming in exchange for state lands in the ACEC; failing that, BLM would administer and develop the minerals. Mineral material extraction would be subject to the following restrictions. (M3, ROD p. 11; ROD pp. 59, 60)

> No occupancy or surface-disturbing activity would be allowed from November 1 through March 31.
>
> Travel over all access roads or material sites would not be permitted during the restricted period. Adequate measures to control and prohibit access would be made conditions of any sale, free use permit, or land exchange.

Alternative B

The existing ACEC boundary would be revised, using the boundary line proposed by The Nature Conservancy and the Murie Audubon Society (map 18), to encompass the following-described lands. Upon inclusion in the ACEC, extraction of the limestone or other salable minerals on public lands located in T. 32 N., R. 80 W., sections 27, 28, and 34, (approximately 840 acres) would be prohibited.

MAP 18

IS AT

THE BACK OF THIS DOCUMENT

Alternative C

The existing ACEC boundary would be revised by enlarging it approximately ¼-mile to the south, making use of topographical features to screen bald eagle roosts (map 18). Mineral materials located outside the revised ACEC boundary would be available for extraction of limestone or other salable minerals, subject to the following restriction.

> No occupancy or surface-disturbing activity on any access roads or material sites would be permitted from November 1 through March 31. Adequate measures to control and prohibit access would be made conditions of any sale or free use permitted for the salable minerals.

ACEC BOUNDARY ADJUSTMENT

The existing ACEC boundary would be revised by enlarging it approximately 1/4 mile to the south, making use of topographical features to screen bald eagle roosts (map 18). Mineral materials located outside the revised ACEC boundary would be available for extraction of limestone or other salable minerals without seasonal or occupancy restrictions.

In addition, the existing ACEC boundary in the eastern portion of the area would be revised by reducing it to the township line between Ranges 79 and 80 West, which would become the eastern ACEC boundary (map 18).

OTHER MINERALS

Alternative A

The existing federal mineral estate in the ACEC, and any additional mineral estate that may be acquired in the ACEC, would be withdrawn from location and appropriation under the mining laws. Development of existing oil and gas leases would be subject to no surface occupancy, in accordance with the stipulations on those leases. Lands currently unleased would remain unleased; as leases expire, the lands would be offered for new leases subject to the occupancy restrictions currently in place on those leases. (M1, ROD pp. 9, 10; L2, ROD p. 22; WL6, ROD p. 30; SD4, ROD p. 31; ROD p. 63)

Alternative B

All federal mineral estate in the ACEC would be available for oil and gas leasing, with any leases issued subject to a no surface occupancy stipulation. No lands would be withdrawn from location or appropriation under the mining laws. Mining claim location would be allowed subject to the mining laws, regulations found at 43 CFR Part 3800, and the Endangered Species Act.

Alternative C

All existing federal mineral estate in the ACEC, and any additional mineral estate that may be acquired in the ACEC, would be withdrawn from location and appropriation under the mining laws. As oil and gas leases in effect on federal mineral estate in the ACEC expire, the leases would not be renewed. Lands not currently leased for oil and gas would remain unleased, and no new oil and gas leases would be issued.

OTHER RESOURCE AREA ROOSTS

Bald eagle roost habitat areas outside the ACEC are listed in appendix D which includes the acreage of each roost. Maps 3 through 13, located in the "Affected Environment" section show the roosts' habitat boundaries.

The Cole Creek roost is addressed separately for the "Access, Recreation, and Other Land Uses" alternatives because there are decisions in the RMP relating to these types of land uses that are specific to the lands in this roost. Where "All Roosts" are identified, all roosts (excluding the Jackson Canyon ACEC) are considered under the alternatives that follow.

Each alternative for the Cole Creek roost clarifies inconsistencies in the RMP between disposal of riverfront parcels downstream of Casper, access acquisition, and retention for bald eagle management. The significance of the Cole Creek parcel for bald eagles was unknown when the RMP was completed.

ACCESS, RECREATION, AND OTHER LAND USES

Cole Creek Roost

Alternative A

The public lands in this roost would be retained in federal ownership. Acquisition of access easements would be pursued to provide legal access to the North Platte River for public recreation uses. Other than acquisition of easements, no improvements would be made. (L4, ROD p. 23; R1, ROD p. 24; ROD pp. 54, 59)

Alternative B

The BLM would attempt to acquire private land along the North Platte River in the vicinity of this roost. Acquisition of access easements would be pursued to provide legal access to the North Platte River for public recreation uses. After lands or access easements have been obtained, recreation facilities, such as upgraded access roads, and designated parking and camping areas, would be developed. ORV use would be limited to designated (and signed) roads and vehicle routes. Only summer recreation use would be allowed; construction and use activities would not be allowed from November 1 through March 31.

Alternative C

The public lands in this roost would be available for disposal to entities that will manage the lands to maintain the resource values present. Acquisition of lands or access easements would not be pursued. Neither legal nor improved road access would be provided to the North Platte River in this bald eagle roost.

All Roosts

Alternative A

No new roads or other surface developments would be authorized on public lands in the bald eagle winter roosting areas. No disturbance to trees, or improvement of roads or legal access would be allowed except as needed for fire suppression or for bald eagle habitat improvement or maintenance. Habitat improvement or maintenance efforts would not be allowed from November 1 through March 31. (WL6, ROD p. 30; ROD p. 54)

Continued use or improvement of existing roads on public lands in bald eagle roost areas during the period from November 1 through March 31 would be analyzed on a case-by-case basis in accordance with the Endangered Species Act.

No improvement of roads or legal access would be allowed on public lands in portions of the Pine Mountain East and Pine Mountain West roosts. These areas are located in the W½SE¼, section 19, W½NE¼, section 30, T. 35 N., R. 83 W., and the SE¼SW¼, section 13, E½, E½W½, section 24, NE¼, E½NW¼, section 25, T. 35 N., R. 84 W. (M1, pp. 9, 10; WL6, ROD pp. 29, 30)

Alternative B

On public lands, no improvement of the existing condition of roads or legal access would be allowed, and no new roads would be constructed. No new authorizations for roads or other facilities would be approved on public lands in any of the roosts.

FIRE MANAGEMENT

All Roosts

Alternative A

All federal lands within or adjacent to roosts would be designated full suppression zones. Full suppression could include suppression of wildfires with all available resources, including vehicle use on existing roads and trails, air support, or construction of roads and grading of firebreaks using heavy equipment. To the extent possible, trees would not be cut within 200 yards of the roosts during fire suppression.

The BLM would pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan could be established. That plan would be used for an escaped fire situation analysis plan when needed. Prescribed burning would be implemented where necessary to meet wildlife, range, and timber resource management objectives, but it would not be allowed from November 1 through March 31. (FM3, ROD p. 11)

Alternative B

All federal lands within or adjacent to roosts would be designated priority full suppression zones. Priority full suppression would include full suppression of any fire with ground crews and air support upon initial attack. This could include vehicle use on existing roads and trails, but not construction of roads or grading of fire breaks. To the extent possible, trees would not be cut within 200 yards of the roosts during fire suppression.

The BLM would pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan could be established. That plan would be used for an escaped fire situation analysis plan when needed. Prescribed burning would be implemented where necessary to meet wildlife, range, and timber resource management objectives, but it would not be allowed from November 1 through March 31.

MINERALS

All Roosts

Alternative A

All BLM-administered lands and mineral estate would remain open to oil and gas leasing and development, and development of mineral materials, subject to no surface occupancy or development from November 1 through March 31. This limitation would not apply to maintenance and operation of producing wells. Modifications to this limitation in any year could be approved in writing by the authorized officer. Locatable minerals would be available for location and development subject to compliance with the Endangered Species Act. (M1, ROD pp. 9, 10; M3, ROD p. 11; M4, ROD p. 11; WL6, ROD p. 30)

Alternative B

All BLM-administered lands and mineral estate would remain open to oil and gas leasing and development subject to the stipulation that no surface occupancy or development within the roost areas would be allowed at any time. This limitation would apply to maintenance and operation of producing wells, and modifications to this limitation would not be approved. These restrictions would not apply to existing lease facilities. Development of mineral materials would be allowed subject to the stipulation that no surface occupancy or development within the roost areas would be allowed from November 1 through March 31. Locatable minerals would be available for location and development subject to compliance with the Endangered Species Act.

Alternative C

All BLM-administered lands and mineral estate in bald eagle roost areas would be withdrawn from location and appropriation under the mining laws. As oil and gas leases currently in effect on federal mineral estate expire, the leases would not be renewed. Lands not currently leased for oil and gas would remain unleased, and no new oil and gas leases would be issued. Mineral materials would not be available for disposal.

NESTS

Alternative A

On public lands, surface development would be prohibited within ¼-mile of the North Platte River, which includes the nests, on a year-round basis. In addition, surface development within ½ mile of the Careyhurst nest would not be allowed from February 1 through August 15. This limitation would not apply to the Rawhide nest.

At the Rawhide nest, and for actions within ½ to 1 mile of the Careyhurst nest, or for newly discovered nests, the size of the buffer zone would be determined case by case. Type of action proposed, topography, and raptor prey habitat surrounding the nest would be considered, and a buffer zone determination would be made in consultation with the FWS and the WGFD. (SWA2, ROD p. 27; WL7, ROD p. 30; ROD pp. 54-59)

Alternative B

On public lands, surface development would be prohibited within 1-mile of known or discovered nests on a year-round basis. The known nests' buffer zones are shown on maps 14 and 15 in the "Affected Environment" section, and encompass approximately 3,200 acres at the Careyhurst nest, and 2,200 acres at the Rawhide nest.

Unless a revision of the buffer zone were proposed, additional consultation with the FWS and the WGFD on actions requiring BLM approval would not be required.

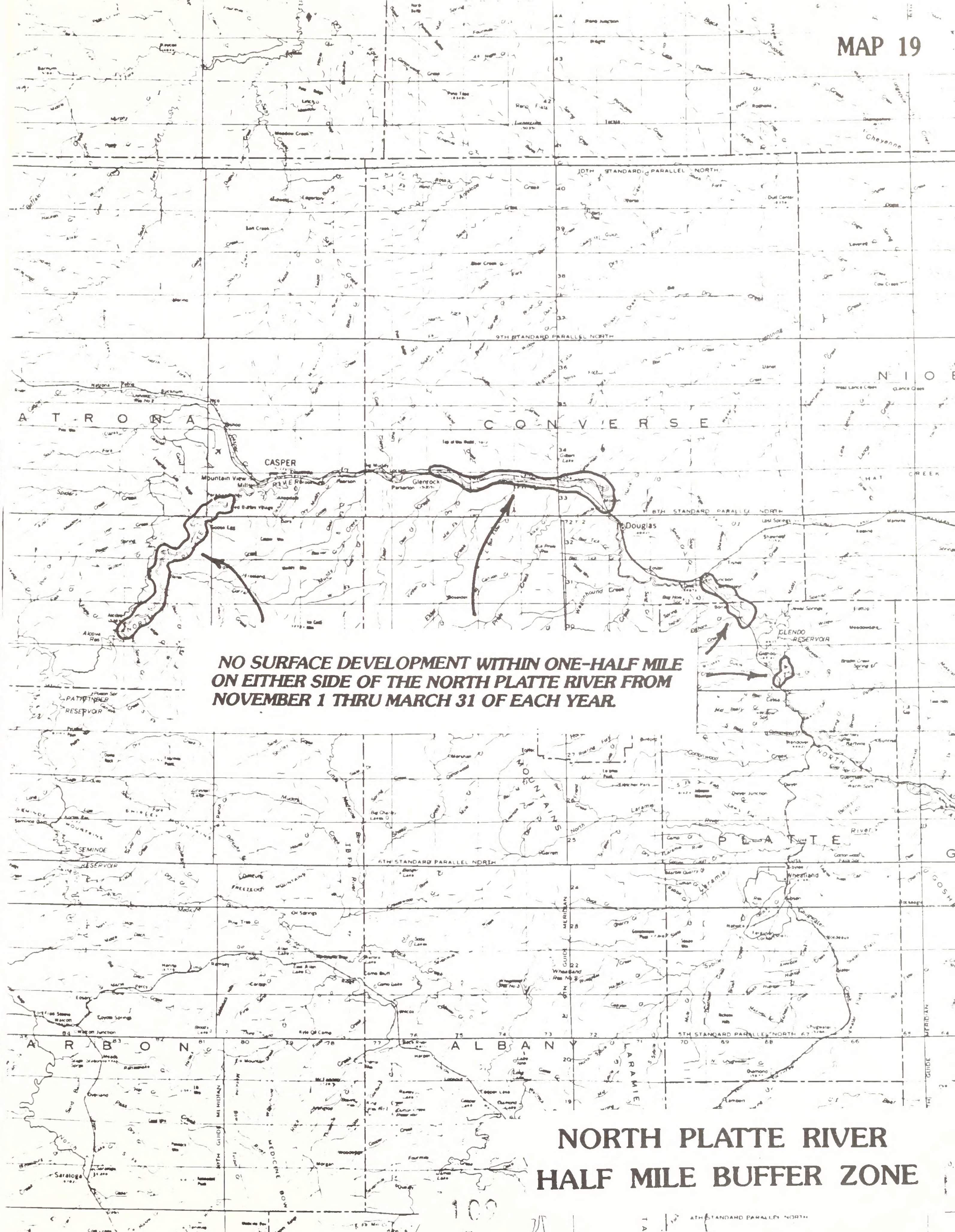
FEEDING HABITAT AREAS

NORTH PLATTE RIVER

Alternative A

The BLM would attempt to acquire riverfront land along the North Platte River upstream of Casper and dispose of BLM-administered lands along the North Platte River downstream of Casper. Excluding the Cole Creek roost, the downstream lands would be available for disposal only to entities that will manage the land to maintain the resource values present. (L1, ROD p. 13; ROD p. 54)

Surface development would be prohibited on public lands within ¼ mile of the North Platte River on a year-round basis. This limitation would not apply to recreation or habitat improvement developments. In addition, mineral material or other surface development on specific parcels of public land (map 19) within ½ mile of the river would not be allowed from November 1 through March 31. Modifications to this seasonal limitation in any year may be approved in writing by the authorized officer. This limitation would not apply to maintenance and operation of existing or producing mineral facilities. (M3, ROD p. 11; SWA2, ROD p. 27; WL6, ROD pp. 29, 30, 59)



NO SURFACE DEVELOPMENT WITHIN ONE-HALF MILE ON EITHER SIDE OF THE NORTH PLATTE RIVER FROM NOVEMBER 1 THRU MARCH 31 OF EACH YEAR.

NORTH PLATTE RIVER HALF MILE BUFFER ZONE

The BLM would improve bald eagle feeding habitat on public land along the river upstream of Casper by planting cottonwood trees or by placing suitable structures along the river for use by bald eagles during feeding activity.

Alternative B

The BLM would attempt to acquire riverfront land on public lands along the North Platte River upstream of Casper and dispose of BLM-administered lands along the North Platte River downstream of Casper. Excluding the Cole Creek roost, the downstream lands would be available for disposal only to entities that will manage the land to maintain the resource values present. (L1, ROD p. 13; ROD p. 54)

Mineral material or other surface development on public lands would be allowed within ¼ mile of the North Platte River, subject to the restriction that no surface occupancy would be allowed from November 1 through March 31, on approximately 240 acres of federal mineral estate located in the NE¼, and W½SE¼, section 11, T. 31 N., R. 82 W.

The BLM would improve bald eagle feeding habitat on public lands along the river upstream of Casper by planting cottonwood trees or by placing suitable structures along the river for use by bald eagles during feeding activity.

RANGELANDS

Alternative A

No seasonal or occupancy restrictions would be applied to public rangelands feeding areas.

Alternative B

The BLM would develop a public education program for bald eagle feeding areas along the North Platte River and on public rangelands. Under the program, information would be distributed to landowners, grazing lessees, and the general public. Information would be designed to identify ways land users could avoid hazards to bald eagles, and benefit bald eagles using the feeding areas where possible.

FLYWAYS

Alternative A

Actions proposed on BLM-administered lands in known or other discovered bald eagle flyways would be analyzed on a case-by-case basis. Consultation with the FWS in accordance with the Endangered Species Act would be initiated if required. No surface development would be permitted on federal lands in the Emigrant Gap flyway, which are closely associated with the Jackson Canyon ACEC. The federal lands are located in T. 33 N., R. 81 W., sections 13, 14, 15, 23, 24, 25 and 26, totally 2,640 acres, more or less. (WL6, ROD p. 29)

Alternative B

To be authorized on public lands, new power distribution/transmission lines would have to be designed to reduce hazards to raptors from collisions with the proposed facilities. Other proposed development actions would be subject to analysis and development restrictions outlined under Alternative A.

Alternative C

Mineral material development activity located on public lands in known or other discovered bald eagle flyways would not be permitted from November 1 through March 31. To be authorized, new power distribution/transmission lines on public lands would have to be designed to reduce hazards to raptors from collisions with the proposed facilities.

PREFERRED ALTERNATIVE

The preferred alternative is a combination of planned actions identified for the Jackson Canyon ACEC, other roosts, the nests, and the feeding habitat areas and flyways. The following preferred alternative outlines the actions the BLM has identified as those that could meet the management objectives for bald eagle habitat in the resource area, comply with the Endangered Species Act, and allow BLM to meet legislative objectives of multiple use and sustained yield on the public lands.

JACKSON CANYON ACEC

Recreation

ORV travel in the ACEC would be limited to designated roads and vehicle routes on 3,890 acres of federal surface lands within the 14,000-acre ACEC boundary. Designated ORV routes would be those clearly identified on the ground by signs (map 17). Use of the designated routes on federal lands by ORVs would not be allowed from November 1 through March 31, except when BLM determines (on a case-by-case basis) that administrative access is necessary for fire suppression or prescribed fire actions, or for control of pine beetle infestations, to maintain or improve bald eagle habitat. The ORV routes would be officially designated through publication in the Federal Register.

Access

New authorizations for construction of new roads and other facilities on public lands (which may include private surface-federal mineral estate), and for improvement and maintenance of existing roads on public lands (which may include private surface-federal mineral estate), within or leading directly to the ACEC would not be issued, except as specified in the following paragraph.

A 60-foot wide road to the archery range on the public land now under R&PP lease to the Girl Scouts, proposed for construction by the Natrona County Parks Department, could be authorized by right-of-way. The 60-foot width would meet the requirements under state law for subdivision access, and such right-of-way would allow year-round occupancy. Stipulations in the archery range R&PP development plan would prohibit winter vehicle access on public land beyond the archery range R&PP area.

Exchange

Exchange would be pursued to acquire all state of Wyoming lands within or adjacent to the ACEC; public lands located outside the ACEC area (to be identified by the state of Wyoming) would be disposed of by exchange to the state of Wyoming. Some of the state lands adjacent to the ACEC that were identified during preliminary BLM-state exchange negotiations are located in sections 2, 3, and 4 or T. 31 N., R. 80 W., and in sections 28 and 29 of T. 32 N., R. 80 W. This includes disposal by exchange to the state of Wyoming public lands outside the ACEC boundary that contain limestone deposits (in T. 32 N., R. 80 W., sections 27, 28 and 34), without seasonal surface occupancy restrictions on the patent. However, those exchanged lands would be subject to access and blasting limitations from November 1 through March 31.

Forestry

The acreage and volume identified for timber harvest within the ACEC, including the 163 acres of remaining commercial forest, would be removed from BLM's commercial base. Timber within the ACEC would not be harvested for commercial purposes, but would be actively managed. Silvicultural practices (thinning and mountain pine beetle management) would be implemented to achieve species diversity and to obtain healthy aged and structured stands for the benefit of bald eagle roosting habitat.

Fire Management

All federal lands within or adjacent to the ACEC would be designated priority full suppression zones. Priority full suppression could include full suppression of wildfires with all available resources, including vehicle use on existing roads and trails, air support, construction of roads, and grading of firebreaks using heavy equipment. Any surface disturbance resulting from suppression efforts would be restored and reclaimed immediately after the fire is suppressed. To the extent possible, trees would not be cut within 200 yards of the roosts during fire suppression.

The BLM would pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan could be established. That plan would be used for an escaped fire situation analysis plan when needed. These plans would include identification of areas where grading of roads and/or firebreaks are most needed for fire suppression, and would identify those areas where protection from wildfires is most critical. A draft initial attack plan would be completed by June 30, 1993. Prescribed burning would be implemented where necessary to meet range and timber resource management objectives, but it would not be allowed from November 1 through March 31.

Mineral Materials

None of the previously identified mineral materials alternatives would be selected.

ACEC Boundary Adjustment

The existing ACEC boundary would be revised by enlarging it approximately ¼ mile to the south, making use of topographical features to screen bald eagle roosts (map 18). Mineral materials located outside the revised ACEC boundary would be available for development to extract limestone or other salable minerals without seasonal surface occupancy restrictions. Those lands would be subject to access and blasting limitations from November 1 through March 31.

In addition, the existing ACEC boundary in the eastern portion of the area would be revised by moving it to the township line between Ranges 79 and 80 West, which would become the eastern ACEC boundary (map 18).

Other Minerals

The existing federal mineral estate in the ACEC, and any additional mineral estate that may be acquired in the ACEC, would be withdrawn from location and appropriation under the mining laws. Development of existing oil and gas leases would be subject to no surface occupancy (which is a condition of the existing leases). All federal mineral estate in the ACEC would be available for oil and gas leasing, with any leases issued subject to a no surface occupancy stipulation.

OTHER RESOURCE AREA ROOSTS

Access, Recreation, and Other Land Uses

Cole Creek Roost

The public lands in this roost would be available for disposal to entities that would manage the land to maintain the resource values present, in accordance with RMP decisions identifying this parcel as one of ten 'downstream' parcels available for disposal. Acquisition of lands or access easements would not be pursued. Neither legal nor improved road access would be provided to the North Platte River in this bald eagle roost.

All Roosts

No new roads or other surface developments would be authorized in the bald eagle winter roosting areas. No disturbance to trees, or improvements of roads or legal access would be allowed except as needed for fire suppression or for bald eagle habitat improvement or maintenance. Habitat improvements or maintenance efforts would not be allowed from November 1 through March 31.

Continued use or improvement (i.e., upgrading) of existing roads in bald eagle roost areas from November 1 through March 31 would be analyzed on a case-by-case basis in accordance with the Endangered Species Act.

The road restrictions identified in the RMP for specific portions of the Pine Mountain East and Pine Mountain West roosts are not valid. All the lands identified on the Pine Mountain East and Pine Mountain West roosts maps (maps 8 and 9) are included in this alternative.

Fire Management

All Roosts

All federal lands within or adjacent to roosts would be designated priority full suppression zones. Priority full suppression could include suppression of wildfires with all available resources, including vehicle use on existing roads and trails, air support, or construction of roads and grading of firebreaks using heavy equipment. To the extent possible, trees would not be cut within 200 yards of the roosts during fire suppression.

The BLM would pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan could be established. That plan would be used for an escaped fire situation analysis plan when needed. These plans would include identification of areas where grading of roads and/or firebreaks are most needed for fire suppression, and would identify those areas where protection from wildfires is most critical. A draft initial attack plan would be completed by June 30, 1993. Prescribed burning would be implemented where necessary to meet range and timber resource management objectives, but it would not be allowed from November 1 through March 31.

Minerals

All Roosts

All BLM-administered lands and mineral estate would remain open to oil and gas leasing and development subject to the stipulation that no surface occupancy or development within the roost areas would be allowed at any time. The no surface occupancy stipulation would apply to maintenance and operation of producing wells, and modifications to this limitation would not be approved. The no surface occupancy stipulation, unless currently a condition of an existing lease or authorization, would not apply to maintenance and operation of existing lease facilities. All BLM-administered lands and mineral estate in bald eagle roost areas would be withdrawn from location and appropriation under the mining laws. Mineral materials would not be available for disposal.

NESTS

Surface development would be prohibited on an area from ¼ to 1 mile of known or discovered nests. The specific distance and dimensions of the area on which surface development would be prohibited would be determined on a case-by-case basis after consultation with the FWS in accordance with the Endangered Species Act.

FEEDING AREAS

North Platte River

The BLM would attempt to acquire riverfront land along the North Platte River upstream of Casper and dispose of BLM-administered lands along the North Platte River downstream of Casper. The downstream lands would be available for disposal to entities that would manage the land to maintain the resource values present.

Surface development would be prohibited within ¼ mile of the North Platte River on a year-round basis, except as specified in the following paragraph. This limitation would not apply to recreation or habitat improvement projects. In addition, mineral material or other surface development on specific parcels of land (Map 19) within ½ mile of the river would not be allowed from November 1 through March 31. Modifications to the seasonal limitation in any year could be approved in writing by the authorized officer. The seasonal limitation would not apply to maintenance and operation of existing or producing mineral facilities.

On approximately 240 acres of federal mineral estate located in the NE¼, and W½SE¼, section 11, T. 31 N., R. 82 W., mineral material or other surface development would be allowed within ¼ mile of the North Platte River, subject to the restriction that no surface occupancy would be allowed from November 1 through March 31,

The BLM would improve bald eagle feeding habitat along the river upstream of Casper by planting cottonwood trees or by placing suitable structures along the river for use by bald eagles during feeding activity.

Rangelands

No bald eagle seasonal or occupancy restrictions on public lands, except as may be identified on a site specific basis to protect other wildlife or resource values present, would be applied to rangelands feeding areas.

The BLM would develop a public education program for bald eagle feeding areas along the North Platte River and on public rangelands. Under the program, information would be distributed to landowners, grazing lessees, and the general public. Information would be designed to identify ways land users could avoid hazards to bald eagles, and benefit bald eagles using the feeding areas where possible.

FLYWAYS

Actions proposed in known or other discovered bald eagle flyways would be analyzed on a case-by-case basis. Consultation with the FWS in accordance with the Endangered Species Act would be initiated if required. On approximately 2,640 acres of federal lands in the Emigrant Gap flyway, located in T. 33 N., R. 81 W., sections 13, 14, 15, 23, 24, 25 and 26, new power distribution/transmission lines would have to be designed to reduce hazards to raptors from collisions with the proposed facilities in order to be authorized. Other proposed development or land use proposals would be subject to analysis on a case-by-case basis, with consultation with the FWS initiated if required.

CHAPTER 5: ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

In the "Environmental Consequences" section, the alternatives identified in the "Planned Actions" section are addressed in the order presented in the "Planned Actions" section. The environmental consequences of the alternatives includes possible actions that could occur or be undertaken if the alternative were selected. An exhaustive list of all actions that may be possible under an alternative has not been compiled; rather, those actions which are most likely to occur or are common in the area are discussed.

To aid the reader, each alternative is summarized before the consequences are outlined. These summaries are not copies of the alternatives presented in the Planned Actions section, but are paraphrased and shortened.

The following "Critical Elements" section applies to all bald eagle habitat areas, except as noted.

CRITICAL ELEMENTS

The following critical elements are not known to occur, or to be of concern at this time, within the Jackson Canyon ACEC or any of the roosts, feeding areas, flyways, or nests:

--- air quality
--- areas of critical environmental concern
--- prime or unique farmlands
--- floodplains
--- hazardous and/or solid wastes
--- water quality
--- prime or sole source of drinking water
--- wild and scenic rivers
--- wilderness values

The only known threatened or endangered species in any of the study area locations is the bald eagle. Parts of the study areas do contain prairie dog towns, which are known habitat for black-footed ferrets (see the "Wildlife Resources" section). There are wetlands and riparian zones associated with many of the roosts, the North Platte River feeding areas, and the nests. These are identified under the description of each roost in the "Affected Environment" section.

Cultural resources (prehistoric or historic) may be present, but intensive cultural surveys have not been done. Prior to any surface-disturbing activity requiring BLM authorization, an intensive survey would be necessary. BLM has found no historic information to suggest that bald eagles were using the Jackson Canyon ACEC or other habitat areas at the time of the 1800s settlement of this part of Wyoming took place. According to comments received from the Wyoming Association of Professional Archaeologists, the Goose Egg Ranch and related structures and the scenic vista of Jackson Canyon in or near the ACEC should be considered eligible for nomination to the National Register of Historic Places.

Because bald eagles are significant in Native American religion, the Arapaho and Shoshone Wyoming tribes were contacted by letter during scoping for this HMP and their concerns and comments solicited. Written comments were received from the Northern Arapaho Traditional Elders in response to BLM's letter. According to those comments, the Northern Arapaho Tribe, as well as all Plains Indian Tribes, venerate the eagle as a sacred animal and abhor their misuse and/or mistreatment, including the destruction of their native habitats. The Arapaho people believe that places where the eagles dwell on earth are sacred, and support absolute protection of the bald eagle habitat areas.

Before land uses in bald eagle habitat areas can be authorized, the Native American tribes must be contacted and consultation completed in compliance with the Archeological Resources Protection Act (43 U.S.C. 470aa-11), the National Historic Preservation Act (16 U.S.C. 470-470w-6) and the American Indian Religions Freedom Act (42 U.S.C. 1996).

Air quality may be a concern under certain alternatives. If it is of concern, it will be specifically addressed in the description of environmental consequences for that alternative. Where air quality is not specifically addressed in the environmental consequences discussion of an alternative, it was determined not to be of concern.

JACKSON CANYON ACEC

RECREATION

Alternative A

> ORV travel on public lands in the ACEC would be limited to designated ORV routes on 3,890 acres of federal land, and to the Archery Range. Except for BLM administrative access, use of these routes by ORVs would not be allowed from November 1 through March 31.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, ORV use would be limited to approximately 8 miles of designated roads and trails on 3,890 acres of public lands and would not be allowed from November 1 through March 31.

Under Alternative A, the ORV designation would limit access through the area during the winter period, and would require that vehicles be confined to designated roads and trails or within the Archery Range area at other times. Winter ORV travel on, and use of public land in the bald eagle roosts would be eliminated. Continued use of the Archery Range for winter snowmobiling and cross country skiing is not expected to cause any impacts to the ACEC or bald eagles. Control of snowmobile and skier access beyond the archery range has been instrumental in this regard and must be continued.

Under Alternative A, recreationists on foot, horseback, snowshoes, or skis could get very close, or to, the roosts. Eagles using, approaching, or departing the roost would be disturbed by these human activities, and leave the area to avoid the disturbance. If human activity near the roosts is to frequent, it could result in deterioration of bald eagle winter survival, and eventually cause the bald eagles to abandon roosting habitat in the area.

The restriction on vehicle use would limit new recreation developments in areas without roads, but would enhance the recreation experience for those people interested in isolation away from vehicles and other people.

Restricting winter recreational ORV uses in the ACEC could result in some users having to locate other areas in which to drive snowmobiles or ORVs. Limiting ORV use in the ACEC could increase impacts to another area outside the ACEC, as people will usually find another area in which to use ORVs. Vehicle access on designated roads and trails would only be limited for the five-month period through the winter. Recreationists and other public land users would be unable to access the area by vehicle during this period. This would reduce the opportunities for outdoor recreation in the area for those people unable or unwilling to travel by foot, bicycle, horseback, or on cross-country skis.

Deer hunting area 68 and elk area 19 cover most of the ACEC. Deer hunting opens on October 15 allowing hunters vehicle access for two weeks of the season until November 1. Elk hunting opens on November 1, and elk hunters would be foreclosed from using vehicles for hunting access in the area. Blue and ruffed grouse hunting, open until November 30, must be done on foot. Although there is some opportunity for hunters to get to the roosts on foot, it is unlikely that many hunters would make that much effort. With small populations of chukars and gray (Hungarian) partridge in the ACEC, the BLM expects there would be no hunting of these species, especially after the area is closed to vehicles.

Summer ORV recreation uses could continue on designated trails, and with no restrictions on summer pedestrian uses there is good opportunity for people to reach the roosts. Summer recreation use of the habitat areas increases the risk of wildfires, thus increasing the potential for loss of critical bald eagle winter roost trees or the entire roosts. For example, the 1985 fire, although not known to be caused by recreation use, resulted in only minor damage to the Little Red Creek roost, but two roost trees (snags) that had been used frequently by bald eagles were lost.

Designation of ORV routes in the ACEC will confine vehicle travel to certain areas, in effect confining the impacts of the roads and traffic on them to those specific areas. This minimizes or eliminates the impacts on other areas of the ACEC. Generally, the roads in the ACEC area are two-track trails that have been developed over time by vehicle travel. Surface disturbance is relatively minor and confined to a narrow area, approximately eight feet wide. Vegetation on most of an eight-foot width has been destroyed, and on most trails a strip of vegetation is present down the center between the two tracks of the road. Lack of vegetation on steep slopes allows relatively unchecked water erosion on many of the roads. Many areas within the ACEC have shallow, rocky soils. Once the surface soils are lost and the underlying rock is exposed, as is common on two track trails, this exposed rock tends to suppress further soil erosion. This is particularly true where vehicle travel is light and little disturbance to the rock occurs. Where vehicle traffic is heavier, both the rock and the soils continue to be disturbed, and soil erosion is progressive. Continued traffic precludes any opportunity for natural restoration of vegetation and nature's healing process to occur. However, when roads are designated and the designation is abided by, other land areas are freed from the impacts to soils, vegetation, visual, and other resources noted above. Proliferation of roads is avoided.

Unless special exceptions are made for the grazing lessee to drive into the ACEC area during the restricted period, the ability to operate on the lease could be affected. Generally, the lessee does not have livestock in the ACEC area before April 1 or after October 31. However, if livestock are kept in the area until mid-November, the seasonal restriction could affect how the operator gains access to the area for working livestock or maintaining range improvements.

No impacts to crucial habitats of other wildlife are expected. Impacts to other wildlife in the area under this alternative should be ordinary, perhaps even less than occurs in other parts of the PRRA, since there would be winter ORV restrictions here that are not in place at other areas.

Without a restriction on public use of trails adjacent to the roosts there is a risk of trespass harvesting of trees at the roosts. Such trespass harvesting has taken place several times in recent years in the Little Red Creek area. The major concern would be the possibility of wildfire, which could damage the roost habitats.

Under Alternative A, limitations on access to designated roads and trails could raise the contracting costs for precommercial timber thinning because contractors would not be able to drive to all work areas. Because burning of slash piles normally occurs in the winter to reduce the fire hazard, restricting winter access would make it difficult to burn slash from thinning or harvest operations and to do other prescribed burning. This could result in slash piles, or unpiled slash, being left in place through the summer, increasing the fuel load and wildfire danger.

Alternative B

> In addition to the use restrictions of Alternative A, public lands in the ACEC would be officially designated closed to all winter travel and to all winter recreation uses, and roads and trails would be physically closed from November 1 through March 31. Under this alternative, the Archery Range would be closed to snowmobiling. Violators would be subject to fines and penalties. Summer recreation uses of designated ORV routes, as outlined in Alternative A, would be allowed.

Alternative B is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions are listed in the "Introduction" section.

Under Alternative B, no pedestrian or vehicle use, except for BLM-coordinated wildlife surveys and patrols, would be allowed during the winter. Existing roads and trails could be barricaded to prevent use. Violators could be cited by BLM law enforcement personnel resulting in a fine or other penalty.

Alternative B would close public lands in the ACEC to all winter travel and recreation uses. Access in the winter by vehicles, snowmobiles, snowshoeing, hiking, equestrians, and pedestrians would be prohibited. Non-winter recreational pursuits would be confined to using designated roads and trails as under Alternative A. Snowmobiling, and all other winter recreation uses on public lands in the ACEC would be effectively eliminated, including termination of the currently authorized snowmobile use in the Archery Range. The Wyoming Girl Scout Council prefers this alternative because the archery range would be closed to snowmobiling. The council has provided BLM photographs that show that cross-country snowmobile use has occurred on the R&PP lease, although whether it originates from the archery range is not certain. The council believes it is in their best interest to restrict activities as much as possible in the area of their camp (R&PP lease) for the protection of their property, buildings, and members/campers (Cameron 1991).

This alternative would effectively eliminate elk hunting, and severely limit grouse hunting. Deer and antelope hunting seasons open and close before the winter seasonal restriction and would not be affected.

Impacts to bald eagles or their habitats would be minimal under this alternative. ORV recreation uses would be very low, with only trespass use occurring during winter on public lands. ORV use could still occur on private and state lands. Since private lands in the Jackson Canyon portion of the ACEC are within conservation easements that discourage winter use, the overall level of disturbance resulting from ORV use would be low.

Any ORV or pedestrian uses on public lands during the winter would be subject to trespass fines and penalties. Such use would be expected to be low on private and state lands because the private lands conservation easements discourage winter use in the Jackson Canyon portion of the ACEC. Hunting, mostly for blue grouse and elk, during the seasonal closure would decrease below the low level of use now taking place.

These lower levels of vehicle and pedestrian recreation use during winter would result in less opportunity for people to get close or to the roosts than is now available. Impacts to eagles from winter recreation would be similar to those described for Alternative A, but at a lower level. No physical impacts to roost or buffer habitat would be expected.

Impacts on bald eagle habitat from summer ORV use would be similar to the existing level described under Alternative A. No direct impacts to bald eagles would occur from summer recreation. Without a restriction on public use of the trails adjacent to the roosts there is a risk of wildfire or trespass harvesting of trees at the roosts.

Alternative B would have impacts similar to those identified for Alternative A on grazing lease operations.

No impacts to crucial habitats of other wildlife are expected. The impacts to other wildlife should be minor, less than in other areas of the PRRA since there are ORV restrictions here.

Impacts to the forestry program under Alternative B would be similar to those described for Alternative A. Physically blocking roads or trails would make fire suppression more difficult and would result in a higher potential of damage to private lands or improvements near the ACEC.

ACCESS

Alternative A

> Construction of new roads or upgrading of existing roads would not be permitted on public lands within the Jackson Canyon ACEC. Authorizations for new or existing roads within the ACEC would not be approved. Use of designated roads and trails could continue subject to the seasonal restriction.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, use of existing roads and trails could continue subject to ORV limits and no surface occupancy from November 1 through March 31, but construction of new roads and upgrading of existing roads would be prohibited. Some uses of existing roads and trails that could occur include: recreational use by the public; vehicle travel over existing roads and trails by state and federal agencies or their contractors and permittees for administrative purposes; use of roads and trails for livestock grazing operations, including operation and maintenance of facilities; and, BLM-coordinated bald eagle roost counts and roost stand analyses.

Authorizations would not be issued for existing roads or other right-of-way facilities, and other facilities such as pipelines or power lines for range improvements would not be authorized.

Under this alternative sufficient access is available for BLM to continue to perform bald eagle roost stand analyses. Observers doing bald eagle counts could disturb bald eagles, since this activity takes place at the most crucial time and close to the eagles on the roosts. A mitigating factor is that the counts are done infrequently and over a short time period (usually two to three hours during the late afternoon of one or two days per winter). Bald eagle habitat would not be physically impacted by this action.

Prohibiting new road construction limits opportunities for recreation developments. Without access, few if any new facilities of any sizable proportion could be constructed using conventional practices. If any recreation facilities were constructed without benefit of road construction, they would generally receive limited use by the small segment of the population willing to walk, bicycle, ski, or horseback into such facilities.

This alternative prohibits both authorization and upgrading of the Archery Range Road. If the road is not authorized, legal access is not available to the site. For all practical purposes, legal access cannot be obtained on any alternate route due to topographic constraints. Without legal access, title to the archery range is subject to reversion to the United States under the R&PP Act. If title does revert to the United States, under BLM administration it is expected that use of the range would cease since easement acquisition by BLM is not planned.

Since the existing road crosses private lands, easements from the landowners are necessary to provide legal public access. The landowners may be reluctant to grant these easements unless the county obtains a 60-foot wide easement or right-of-way along the entire road. Without a 60-foot easement, subdivision is not possible, and the landowners' opportunities in that regard are foreclosed.

Although the existing road is basically a two-track trail, upgrading is not essential to continued use of the archery range. Natrona County personnel have indicated that at some future date upgrading would be necessary to accommodate use of the archery range and to meet access needs for fire management in the general area.

The Wyoming Girl Scout Council has stated opposition to improvement of access in the area, and prefers alternative A over alternatives B and C. The council believes it is in their best interest to restrict activities as much as possible in the area of their camp (R&PP lease) for the protection of their property, buildings, and members/campers (Cameron 1991).

Under this alternative, any road in the area other than those now existing would be precluded. Future uses in the area for mineral material extraction, oil and gas drilling, or subdivision development that require legal access or new access construction in the ACEC would be prohibited. Road development could occur with development of locatable minerals (mining claims) under the General Mining Law of 1872, but would be subject to compliance with the Endangered Species Act.

Oil and gas development would be all but excluded since road access is usually critical to such an operation. Helicopter use or directional drilling remain as options. Construction of utility lines across the ACEC or to serve facilities within the ACEC area would also be prohibited. This would also limit development options.

Development such as new roads, pipelines, and power lines, and operation or maintenance activity during winter (e.g., producing wells, mines), on state or private lands within or adjacent to the ACEC could occur when eagles are present. An increase of access to the ACEC could lead to increased use by the public for casual recreation. Users could enter the ACEC on the new roads and use existing trails in the ACEC during winter. Auditory and visual disturbances to eagles would be caused by winter travel on those routes, some of which pass 50 feet from, and within sight of, some roost trees. Unrestricted recreation activities (hiking, skiing, camping, and snowmobiling) could occur if access barriers were not installed, or if those barriers or enforcement of the winter restriction are insufficient. This would disturb eagles in the winter. Impacts would be increased by unrestricted evening or night use.

Natural resource values such as native vegetation, soil structure, scenic quality, and the relatively natural conditions in the area would be preserved by limiting road use and construction, and by prohibiting facility developments on public lands.

Alternative A should not have a significant impact on grazing operations in the Jackson Canyon ACEC area. Since no trail is located near the Jackson Canyon roost, the grazing lessee is not anticipated to travel near that area. In the Little Red Creek area, the lessee could enter the area during winter if roads and trails were not barricaded. Bald eagles could be disturbed in the Little Red Creek roost area by the lessee traveling on a trail that runs within 100 feet and within sight of some roost trees. However, this area is not usually grazed in winter, so these impacts are unlikely.

No impacts to crucial habitats of other wildlife are expected. The impacts to other wildlife should be minor, less than in other areas of the PRRA since there are ORV restrictions here.

Access restrictions under this alternative could make it difficult to sell timber. Operators complain that existing unimproved trails are in such bad shape that large trucks used for logging would not be able to travel them. This requires that any timber harvest be done under small contracts so that only smaller trucks are used. Implementing forest stand treatments to achieve objectives for bald eagle habitat may require the use of commercial sales. There may be difficulty in using commercial sales to achieve the stand treatments. The cost of paying for treatment without the use of commercial sales could be very high.

Under Alternative A, improvement of timber stands to benefit bald eagle habitat could be performed by contractors/permittees using existing access routes. This could reduce the potential for wildfires in damaged timber stands. However, limited access could restrict or limit timber stand improvement because of increased contracting costs, and because difficulty in removing and selling timber harvested may be encountered. However, using existing access routes reduces the potential for damage to bald eagle habitat.

With limited access, performing prescribed burns to accomplish wildlife habitat objectives would be more difficult. This could cause an increase in frequency, severity, or size of wildfires, and would increase the potential for damage to the bald eagle roost habitat.

Although fire trucks are often able to travel cross-country, and may not always be constrained by a lack of improved roads, with the limited access available under this alternative, wildfires may be uncontrolled for a longer period of time. Prohibiting road construction would eliminate the use of heavy equipment for firebreak construction. Higher costs would result from more dependence on other fire suppression resources such as aircraft. There would be higher potential for escaped fires under this alternative. This could result in damage to bald eagle roost trees or the entire habitat.

Alternative B

New authorizations for construction of new roads and other facilities on public lands, and for upgrading and maintenance of existing roads on public lands, within or leading directly to the ACEC would not be issued, except as follows. A 60-foot wide road to the archery range on the public land now under R&PP lease could be authorized by right-of-way. The 60-foot width is intended to meet state law requirements for subdivision access, and such right-of-way could allow year-round occupancy. Winter vehicle access on federal land beyond the archery range R&PP area would be prohibited.

Alternative B is in conformance with the RMP and is not inconsistent with state and local planning. This alternative would clarify existing RMP decisions. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Introduction" section.

Alternative B would allow new road construction, upgrading of existing roads, and authorization of rights-of-way on these roads subject to the seasonal restriction. Other facilities such as power lines and pipelines would also be allowed. This alternative would specifically allow upgrading of the Archery Range Road to a 60-foot width, but winter access beyond the archery range would be prohibited. The Wyoming Girl Scout Council is opposed to a 60-foot wide road crossing their R&PP lease. The council does not have the financial resources for repairs that would be needed as a result of increased access to the area (Cameron 1991).

Under this alternative, there is a higher probability for improved roads to and within the ACEC. This alternative would also authorize new roads and rights-of-way within and leading directly to the ACEC with the seasonal occupancy stipulation. Mineral material mining, oil and gas drilling, residential and subdivision developments, and recreational activities could occur in and adjacent to the ACEC in association with improved or new roads.

Improved access to or in the ACEC is a concern unless there are barriers that effectively prevent winter access within the ACEC. The local experience is that BLM is not always successful at keeping people out of closed areas. If development and activity increased in the ACEC, there would likely be disturbance to roosting eagles. However, constructing barriers could reduce impacts to bald eagles by physically restricting access to the roosts.

Access to the area for administration of public lands and bald eagle habitat could be less difficult. BLM could continue to perform bald eagle roost stand analyses and bald eagle counts. More frequent roost counts could be performed under this alternative, although cooperative efforts could limit the number of counts and provide for information sharing. Observers doing bald eagle counts could disturb bald eagles, since this activity takes place at the most crucial time and close to the eagles on the roosts. Bald eagle habitat would not be physically impacted by eagle counts.

In general, activity at the ACEC boundary that may occur as a result of increased access would not disturb eagles if the concept of an appropriate buffer is true. That is, if the boundary is sufficient to provide for no disturbance to eagles from winter activities outside the boundary. In sections 21, 27, 28, T. 32 N., R. 80 W., the ACEC boundary lies at the ridgetop within view of eagles flying into either the Jackson Canyon or Little Red Creek roost. This buffer may not be adequate, since activities could take place on the ridgetop and cause eagles flying to the roosts to turn and fly away from the roosts. Such behavior has been observed as eagles reacted to persons walking to observation points. In some of these situations, the persons were one-half to one mile away from the roost, but still in view of the eagles flying to the roosts.

Under this alternative, Natrona County's acquisition of private land easements and a BLM right-of-way for a 60-foot wide road would allow subdivision development on 1,480 acres of private lands near the archery range. This could lead to additional cabins within the ACEC boundary, and an increase in the number of people with relatively easy access to the area. Over 400 housing units northeast and east of the roost could be constructed (table 6).

TABLE 6

Subdivision Housing Units Possible In or Near the ACEC Under Current Zoning Districts

Location	Acreage	County Zoning	Dwellings Possible
T.30N., R.80W.			
Section 19	440	MR (Mtn. Residential: 1 dwelling/2 acres	220
	80	R (Ranch: 1 dwelling/ 20 acres)	4
Section 30	600	ME (Mtn. Estates: 1 dwelling/5 acres)	120
Section 31	360	ME (Mtn. Estates: 1 dwelling/5 acres)	72
TOTAL:	1,480	TOTAL:	416

Housing developments could occur as close as 3/4 mile from the Little Red Creek roost. The BLM would not expect impacts to the eagles from activities confined within the housing areas, since bald eagles approach the Little Red Creek roost from the northwest and southwest. However, there is a likelihood that some residents would go into the ACEC during winter. At sensitive times eagles could be disturbed by people traveling into the ACEC and to the roost from the subdivision. The same impact could result if the public accessed the ACEC through the subdivision for casual recreation. Disturbances include noises from voices and vehicles, and the visibility of people getting very close or to the roost. Such disturbances could cause bald eagles to leave the roost, and frequent disturbances could cause bald eagles to abandon the roost.

New development or upgrading of other access roads, pipelines, power lines, and other facilities associated with subdivision development could cause several kinds of impacts. There could be physical hazards to eagles from above-ground structures, especially when the eagles are flying low over the terrain near roosts in early morning and when returning to the roosts in late afternoon and early evening. Collisions with structures could result in death or severe injury to bald eagles.

Constructed road or pipeline facilities would require routine maintenance, or emergency repair, and that work could occur during winter when bald eagles are present. Linear facilities would be avenues for trespass use by casual recreationists during winter. The result of emergency or unauthorized activities in or near the roost could be abandonment of the roosts. This could result in eagles using less suitable habitats, which may reduce the bald eagles' winter survival or breeding success.

Year-round access to the archery range would provide for vehicles of any type, including two-wheel drive passenger vehicles, to reach an area within 3/4-mile of the Little Red Creek roost. The likelihood of casual recreationists getting to the roost would be much greater than it presently is.

With additional access available to recreationists and others, there could be an increase in summer activity, with resultant increase in disturbance to wildlife in general. More winter use would be likely due to the proximity of development to the ACEC, and when more people use an area during summer, there is a corresponding increase of use during winter. People would be able to travel into areas not previously disturbed. There is also the possibility of access development in or near the ACEC in conjunction with mining claims developed under the General Mining Law of 1872.

Analysis of impacts would occur for each project, based on the specific details of that project. In general, varying levels of impacts to vegetation, soils, and visual quality could be anticipated in association with facility development. Road construction or upgrading would increase the accessibility into the area resulting in increased visual intrusions and degrading of the natural conditions in this environment. Use patterns and intensities would alter the character of the area from relatively natural and undisturbed to more intensively developed and used.

If the archery range road is upgraded, construction would remove vegetation, including timber, from an 9.24-acre area, assuming a construction width of 60 feet and a road length of 6,707 feet from Micro County Road to the archery range parking area. Soils and vegetation would be disturbed by construction, resulting in increased erosion. The soil structure also would be altered where topsoil is stripped and subsoil manipulated to form a crowned and ditched road. Erosion could continue on a long-term basis over most of the disturbed area although construction and maintenance of drainage controls such as water turnouts could minimize the extent of erosion. Clearing vegetation, particularly timber, would increase the visual impact of the road project.

Since there could be more access roads and other routes into the area under Alternative B, there would be some increased chance of disturbance to livestock. However, the grazing lessee should not require any new roads. Thus, this alternative should not have a significant impact on grazing operations in the ACEC area.

The improvement of access roads under this alternative would allow the use of commercial forest sales to achieve forest stand objectives in the ACEC. This could lower the cost of achieving those objectives. If subdivisions were developed near the archery range road and that private road was not unavailable for log hauling trucks, another road could be constructed for timber hauling trucks to use.

More and improved access roads could facilitate fire prevention and suppression. During suppression efforts, fire trucks could also create new roads or fire break routes which could later be used by the general public until reclamation was successful. More trails or roads could result in increased public use during the summer. This use could increase the risk of wildfires in or near the roosts. Alternative B would require extensive rehabilitation measures and high costs for mitigation of whatever damage resulted from fire suppression efforts. It could also lead to more disturbance to trees in the roost area than would result under Alternative A.

There is a high probability of an improved road to and within the ACEC for removal of harvested timber, since there have been several requests from contractors. BLM previously offered to sell timber without improvement of access. Assuming that an improved road would be constructed, there would be much more summer use of the area. Increased risk of wildfire and unauthorized cutting of trees would be possible impacts. The winter use would depend upon whether the road was effectively barricaded and patrolled. Based on similar situations elsewhere, it is likely that some unauthorized use would occur in winter.

Improvement of timber stands to benefit bald eagle habitat could be performed by contractors/permittees using existing access routes, or constructing new routes where needed. This could reduce the potential for wildfires in damaged timber stands. With access available, timber stand improvement contracting costs would decrease, and removal of harvested timber could be facilitated.

Performing prescribed burns to accomplish wildlife objectives would be less difficult than it currently is. This could result in a decrease of frequency or severity of wildfires, and could decrease the potential for damage to the bald eagle roost area habitat.

Construction of new roads in the ACEC would cause visual scars on the landscape. The significance of the scar depends a great deal on visual screening and viewpoint (distance and extent of view), and to a lesser extent on individual perceptions. Where a road crosses an open slope, the contrast can be highly visible. Roads on ridgetops, in timbered areas, and roads that wind through rough topography are generally less visible.

Alternative C

> New access road construction on public lands within or leading directly to the ACEC would not be permitted, and some existing roads and trails located within the ACEC (T. 32 N., R. 80 W., section 25) would be obliterated and revegetated. Rights-of-way for existing roads leading to the ACEC, including the road to the archery range R&PP area, would be authorized subject to no surface occupancy from November 1 through March 31, and the restriction that no road improvements or maintenance exceeding a 50-foot width would be allowed.

Alternative C is in conformance with RMP decisions and is not inconsistent with state and local planning. This alternative would clarity existing RMP decisions. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Introduction" section.

Alternative C would prohibit construction of roads both within and leading to the ACEC. However, rights-of-way could be issued to authorize use or upgrading to a 50-foot width on existing roads subject to the seasonal restriction. Certain existing roads would be reclaimed and closed to further use, and ORV restrictions on the remaining roads would still apply. A right-of-way would be issued for the Archery Range Road; it would legalize the road and allow upgrading. However, use of the Archery Range road would be subject to seasonal use restrictions.

Under this alternative, less access to the roosts would be available than currently exists. BLM could continue to perform bald eagle roost stand analyses, but with more difficult access, fewer bald eagle roost surveys would be done. As a result, fewer impacts to bald eagles from surveys would result than under Alternatives A and B. Bald eagle habitat would not be physically impacted by this action.

This alternative would allow for some development within the ACEC area by allowing authorization and use of existing roads. Recreation facilities could be developed more readily with some form of road access. These facilities would also be more accessible to a larger group of people if access is available. Management control of ORV use may become more complex and demanding to properly control use and development of facilities in this area. Construction of barriers could mitigate impacts to bald eagles.

Legal access to the archery range could be obtained over public land, but there is no assurance the private landowners would grant easements if a 60-foot easement is not available. This may ultimately foreclose legal access to the site, subjecting it to reversion of title to the United States. As in Alternative A, it is likely the area would cease to be used under this scenario. Further, restricting winter use of the archery range road effectively eliminates use of the archery range for snowmobiling -- a use which was approved in the R&PP plan of development and operation. Because this alternative would not provide the most restrictions on access in the area of their R&PP lease, the Wyoming Girl Scout Council prefers alternative A over this alternative.

With fewer roads and trails available to or within the ACEC, future uses of public lands in the area for lands, minerals, or private land subdivision developments that require new or roads upgraded past a 50-foot width over public land could be restricted. Use of roads in or leading directly to the ACEC would be subject to the seasonal restriction. Mineral or other land use activities could occur at the boundary of the ACEC, but without construction of new roads leading directly to the ACEC.

Under this alternative, no physical impact to the roost habitat would result, nor is any impact to the buffer habitat expected. Upgrading the archery range road within a 50-foot width would remove vegetation, including timber from a 7.7-acre area (with road length being 6,707 from the Micro County Road to the archery range parking area).

Location and development of mining claims under the General Mining Law of 1872 would be subject to the restrictions outlined under this alternative, so bald eagle roosts or roosting habitat should not be impacted by mining claim occupancy or development.

Development of minerals, or other land uses on state or private lands, could occur under this alternative. However, there could be restrictions on the construction or use of roads and trails on public land leading to private or state development. This alternative would result in restriction of some access that currently exists, elimination of any proposed winter activity within the ACEC requiring vehicular access, and prohibition of any proposed winter activity outside the ACEC boundary that used a road leading to the ACEC.

Such restrictions would lessen the impacts to bald eagles and the roost and buffer habitats from activities within the ACEC or from people using access roads to private or state developments. The area within the ACEC where these activities could take place during winter would be reduced to only those areas accessible without a BLM right-of-way.

The decrease of access to the ACEC would not prohibit use by the public for casual winter or summer recreation (hiking, skiing, camping, and snowmobiling). However, since public land would have restrictions, there would be less opportunity for winter use. Users could enter the ACEC on designated trails remaining after identified trails have been obliterated. Since fewer trails would be available for recreation activities, heavier use of those trails may occur, and unauthorized use of abandoned trails could occur if access barriers were not installed, or if those barriers or enforcement of the winter restriction are insufficient. Unauthorized winter use that occurred near the roosts could disturb eagles, however bald eagle habitat should not be physically impacted by that use.

With less opportunity for access within the ACEC, there is less likelihood of direct or indirect impacts to bald eagle habitat from summer recreation users, and impacts from summer ORV use would be less than described under Alternative A. With fewer trails available adjacent to the roosts, the risk of wildfire or trespass harvesting of trees at the roosts decreases. Impacts to bald eagle habitat from recreation uses would decrease from those identified under Alternatives A and B.

Impacts to soils, vegetation, and visual resources would occur, but occurrence would be at a lower level than under Alternative B. Changes to the natural state of the area and changes in the outdoor experience (for example, ORV use) would also occur at a less significant level. Reclamation of obliterated roads would reduce soil erosion, visual scars, and replace forage for livestock and wildlife.

Alternative C would restrict access currently available to the grazing lessee in the area, and it could limit lease operation capabilities. Where roads are obliterated, the operator would need to find ways other than motor vehicles to transport materials such as fence posts and wire for range improvement maintenance or for working livestock.

No impacts to other wildlife crucial habitats are expected, and impacts to other wildlife should be minor. The likelihood of impacts to other wildlife during summer would be less with restricted access. However, with limited access, performing prescribed burns to accomplish wildlife habitat objectives would be more difficult. This could cause an increase in frequency or severity of wildfires, and the potential for fire damage to the bald eagle roost habitat could increase.

Although fire trucks are often able to travel cross-country, and may not always be constrained by a lack of improved roads, with the limited access available under this alternative wildfires may be uncontrolled for a longer period of time. Control of fires would be more difficult and could be more costly since other fire suppression resources (such as handcrews and aircraft) would have to be used more often. The potential for escaped fires, and the resulting damage to adjacent private lands and improvements, is high under this alternative. The result could be damage to bald eagle roost trees or loss of the entire habitat.

Under Alternative C, improvement of timber stands to benefit bald eagle habitat could be performed by contractors/permittees using access routes that are not obliterated. This could reduce the potential for wildfires in damaged timber stands, although not as effectively as could be done under Alternatives A and B. However, using fewer access routes than now exist reduces the potential for damage to bald eagle habitat. Less available access could restrict or limit timber stand improvement because of increased contracting costs, and because difficulty in removing and selling timber harvested may be encountered.

EXCHANGE

Alternative A

> The BLM would pursue exchange to acquire all state of Wyoming lands within or adjacent to the ACEC, disposing of public lands located outside the ACEC. This alternative includes disposal to the state of Wyoming (by exchange) of the 840 acres of public lands outside the ACEC boundary that contain limestone deposits, subject to seasonal occupancy patent restrictions.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. This alternative would clarify objectives and decisions discussed in the RMP, RMU 8.

Under Alternative A, public lands outside the ACEC could be exchanged to the state of Wyoming, with a seasonal restriction included in the patent. The mineral materials could be extracted from the lands. Roads and other developments needed for removal of the limestone could be constructed and operated, but no activities would be allowed from November 1 through March 31. The state of Wyoming would be responsible for enforcement of seasonal restrictions.

Under this alternative, BLM would pursue a land exchange with the state. All state lands inside the ACEC and identified lands adjacent to the ACEC would be acquired by BLM. There is no assurance at this time that the state would accept identified lands outside the ACEC, or exchange state lands within the ACEC. Adding covenants to patents concerning seasonal use of the land is problematic at best. It puts a limitation on the title that must be factored into the appraised value, and requires long-term state administrative action. The seasonal restriction may limit the desirability of land parcels for state exchange acquisition, and could eliminate viability of the exchange.

If the exchange were completed, an increase in public land acreage of about 2,500 acres in the ACEC would result. With these lands under BLM administration, land management actions could emphasize enhancement of bald eagle habitat, whereas such a priority is not necessarily in place now. This change in priority should reduce impacts to bald eagles and their habitat below the current situation.

Exchange of land titles has little direct impact on natural resource values such as vegetation, wildlife, and scenic quality. The impacts that occur, if any, result from subsequent actions on the land. There is often no clear knowledge of the future uses of exchange lands. Sometimes an exchange is consummated based on speculation of land use capability. At other times it is merely to realign property ownerships or boundaries for more efficient land management. In this case, there are more specific intentions for an exchange. BLM plans to include acquired state lands in the ACEC under the management umbrella of this HMP. State lands at Goldeneye Reservoir (25 miles west of Casper) would also be acquired, and would be managed under BLM's Goldeneye Wildlife and Recreation Area Management Plan. The state has indicated interest in authorizing a limestone quarry on lands they could acquire outside the ACEC.

Acquisition of the state lands, either within the ACEC or at Goldeneye Reservoir, by BLM would place them under BLM jurisdiction, resulting in consolidated ownership and management of the lands. This would allow for more efficient and consistent management of the lands, giving greater emphasis to bald eagle and other wildlife habitat management. Acquired lands in the ACEC would be managed under this HMP, with the principle emphasis on support for bald eagle habitat. At Goldeneye Reservoir, BLM could benefit by gaining control over the area, and could invest funds necessary to enhance recreation development and public use.

The BLM would acquire a 40-acre state land parcel on Little Red Creek. The parcel contains an exposed outcrop of the Alcova Limestone Formation. In acquiring this parcel, the BLM could control limestone mining activity on the outcrop, regulating development proposals that pose a threat to the eagles and their habitat in the area. However, under this alternative, the exchange would transfer some limestone-bearing lands to the state for development of a quarry. Because the lands proposed for conveyance to the state are farther from the eagle roosts, they are expected to be less critical to preservation of the eagle roost area and habitat than the 40-acre state parcel on Little Red Creek.

The state is required by law to generate income from State school lands; the income generated goes into the school trust fund, and proceeds from the fund are used in support of the state school system. In keeping with this mandate, the state is interested in acquiring lands, such as those adjacent to the ACEC containing limestone, that can generate income for the fund. Other lands of interest to the state are usually timbered or have potential for commercial, industrial, or other economic development.

Once land titles have been exchanged, existing authorized land uses would be honored by the new landowner. Grazing leases on state lands that are conveyed to BLM would be authorized under new BLM leases. Existing grazing leases on BLM lands conveyed to the state could be authorized by new state leases. Other existing authorized uses would be accommodated in similar fashion. Where mineral rights are conveyed, oil and gas and other mineral leases are allowed to run their term under the existing authorization. Once the authorization terminates, new leases are issued by the new landowner as appropriate. In the case of existing rights-of-way, title documents are issued subject to the existing right-of-way, and the new landowner administers that right.

Disposal of BLM land outside the ACEC would remove that acreage from the public land base. Monies distributed to the counties by BLM as payment in lieu of taxes (PILT) on lands acquired by the state would no longer be paid. State lands acquired by BLM, because they are untaxed lands, would not be subject to PILT upon transfer to BLM (43 CFR 1880). Under current state policies, lands acquired by the state would remain open to public use subject to applicable regulations. No significant change is public use or access on the lands should occur. A change from unmanaged recreation to managed recreation would occur on the lands acquired by BLM. The impacts of the different alternatives of recreation management are discussed in the "Recreation" section.

Alternative A would increase the amount of public land located in BLM grazing allotments in the ACEC. Eagle Ridge Ranch has expressed concern that more restrictive management could eventually be placed on these lands if they became public land versus staying in state ownership. Since the state operates under different guidance, and state land management emphasis differs from BLM management, this alternative could impact grazing lessees use of the area.

The lessee holding a state land grazing lease has claimed during meetings with the BLM that the main concern with state lands being transferred to BLM jurisdiction under this exchange alternative is that three natural water sources in or near the ACEC would be come subject to federal, instead of state, control. The lessee uses these water sources to control livestock distribution on federal, state, and private lands. The lessee believes that if the exchange was completed, the operation would become totally reliant on two sources of water on private lands in the allotment. The state land water sources, which the lessee indicated represent a $90,000 value to the operation, would be lost by transferring the lands to the BLM. The lessee indicated that, because federal grazing lease administration by BLM is subject to national level oversight and regulation, exchange would make the lease operation wholly dependent on federal management of leased lands within the allotment.

Although oversight of grazing leases may differ between the state and BLM, federal regulations encourage livestock distribution to realize sustained production of livestock and wildlife forage. One recognized and accepted industry strategy practiced under BLM leases to encourage dispersed use of forage is use of water sources. There is no reason to believe that BLM, locally or on a national level, would abandon this management option and eliminate use of existing water sources that help lessees accomplish sound grazing practices. Given this, there is an extremely low possibility that water sources now available on state lands would be made unusable by transferring land ownership and lease administration from the state to BLM. It is highly unlikely that a monetary loss to the lessee would result from grazing lease oversight being transferred from the state to BLM.

Under Alternative A, BLM management emphasis would be on bald eagle habitat. There should be less likelihood of minerals and land use development, so it is likely there would be less impact to most species of wildlife than currently occurs. State lands acquired by BLM would no longer be managed for maximum economic benefit. No change is expected in management during winter for the wildlife program on the acquired lands. Wildlife inventories might be conducted in summer, but would not cause any impacts to bald eagles or their habitats. The major concern to wildlife resources is the disposal of 840 acres outside the ACEC, and the possible impacts from development of minerals on those lands. Mining impacts are described under the "Mineral Materials" alternatives.

BLM would acquire two areas of commercial timber resources, one in sections 8, 9, and 10, T. 32 N., R. 80 W., near Jackson Canyon and another in the N½, section 36, T. 32 N., R. 80 W., near Little Red Creek. No timber resources in or adjacent to the ACEC would be acquired by the state.

Under this alternative, prescribed burns could be performed on lands acquired by BLM. Responsibility for fire suppression on those lands would fall to BLM. With a consolidated land pattern, a more comprehensive initial attack plan could be prepared and implemented in the event of wildfires. This would result in minimizing impacts of prescribed burns and wildfires on bald eagle habitat.

Under Alternative A, limestone on 840 acres adjacent to the ACEC could be mined and the mineral resource depleted subject to seasonal occupancy restrictions. Any authorization to mine would be issued by the state; the state of Wyoming would receive monetary compensation for the use; and the state would be responsible for enforcing the seasonal restriction. The U.S. Government would not receive any compensation for the material that is mined from the 840 acres, but the minerals present would be considered in the exchange appraisal, and BLM would receive lands from the state that equal the appraised fair market value of the limestone bearing lands.

If the state of Wyoming acquired the 840 acres and chose to authorize mining, the visual quality of the immediate area could deteriorate. Varying levels of vegetation and soils removal could be anticipated in association with mining development as well as increased airborne dust in the area. Visual resource impacts are discussed in more detail in the "Mineral Materials" section.

Alternative B

> The BLM would pursue exchange to acquire 40 acres located in the SE¼SE¼ of section 34, T. 32 N., R 80 W., from the state of Wyoming, disposing of public lands located outside of the ACEC area. Public lands adjacent to the ACEC (T. 32 N., R. 80 W., sections 27, 28, and 34, 840 acres) containing limestone would not be available for exchange.

Alternative B is in conformance with the RMP, and is not inconsistent with state and local planning.

Under Alternative B, BLM would acquire only the 40-acre parcel of state land within the ACEC that contains an exposed Alcova Limestone outcrop. Extraction of mineral materials would not be allowed on those lands. The 840 acres of public land adjacent to the ACEC that contain limestone deposits would be retained in federal ownership.

This alternative is much like alternative A, in terms of acquiring the critical 40-acre state land parcel containing the limestone outcrop. By such acquisition, BLM would be in a position to manage the entire formation adjacent to the ACEC. Since the lands with limestone outside the ACEC would not be exchanged to the state, BLM would control development of the entire formation. This would preclude mining and utilization of those limestone resources. In essence, the commitment barring exchange of those resources is a commitment of the resource to nondevelopment.

State lands, and private lands not within conservation easements, would be available for maximum economic return through grazing, mining, timber production, and other land uses. Bald eagles could potentially be impacted by development and recreational activities occurring during winter while eagles are at roosts or approaching them. Such actions could take place on state lands as close as 0.3 mile from the Little Red Creek roost and as close as 1.3 miles from the Jackson Canyon roost.

Under Alternative B, benefits of the larger exchange (Alternative A), such as improved management efficiency, would not be realized. The state would continue to manage the remaining state lands in the ACEC, but has stated that this alternative "would adversely effect (sic) manageability of remaining state lands and would be rejected under Board rules." Further, the state indicated they would not exchange the 40 acres containing the limestone outcrop unless they acquired other limestone outside the ACEC (Schrinar 1991). BLM acquisition of state lands at Goldeneye Reservoir would not be considered under this proposal. A separate exchange could still be utilized for that purpose.

Alternative B would not significantly affect grazing operations in the area. The 40 acres of state land acquired by BLM would be included in a BLM grazing lease; the remaining state lands would continue to be administered by the state for grazing.

Impacts to other wildlife habitat in the ACEC could be greater than those identified for Alternative A, since the state lands, and private lands not within conservation easements, would be available for maximum economic return rather than being managed for bald eagle or other wildlife habitat.

Impacts associated with limestone mining on the 840 acres of public land adjacent to the ACEC, described in the "Mineral Materials" section, would not occur under this alternative. However, the same kind of mining could occur elsewhere around the ACEC with similar impacts to other wildlife habitat.

Since BLM would not acquire any commercial forestlands, no impacts to commercial forestry resources should result from Alternative B. Opportunities for prescribed burns that could be available under Alternative A to benefit the wildlife and timber resources would not be realized under Alternative B.

Current difficulties arising in wildfire suppression from the intermingled land pattern would continue. However, agreements with landowners and other agencies could minimize impacts to fire suppression efforts.

Under Alternative B extraction of mineral materials would not be allowed on the 40-acre parcel of land acquired from the state or any public lands within the ACEC. The 840 acres of public lands adjacent to the ACEC boundary would not be available for mineral material extraction, but other public lands would still be available for mining of limestone. If other lands retained in federal ownership were mined, payment to the U.S. Government would be required. The limestone resource would be depleted by the amount that is mined.

Visual impacts in the immediate vicinity of Jackson Canyon that could occur under Alternative A would be greatly reduced or eliminated under Alternative B. If mining occurred on other public lands near, but outside the ACEC, (and not on the identified 840 acres), visual impacts such as those identified under Alternative A (discussed in detail in the "Mineral Materials" section) could result in the area of the mining.

Alternative C

> The BLM would pursue exchange to acquire all state of Wyoming lands within or adjacent to the ACEC that are not leased to the Eagle Ridge Ranch Company (approximately 1,160 acres) and would dispose of public lands located outside the ACEC area. Public lands adjacent to the ACEC in T. 32 N., R. 80 W., sections 27, 28, and 34, (840 acres) containing limestone would not be available for exchange.

Alternative C is in conformance with the RMP, and would clarify objectives and decisions in the RMP RMU 8. The alternative is not inconsistent with state and local planning.

Under Alternative C, lands leased from the state of Wyoming by the Eagle Ridge Ranch Company would not be included in a BLM-State exchange; they would be retained and managed by the state. The grazing lessee on those lands has indicated opposition to conveyance of the state lands to BLM. Other state lands in the ACEC would be acquired by BLM (approximately 1,900 acres). Landownership within the ACEC would continue to be a mix of federal, state, and private lands.

Even with less state lands coming into BLM administration, there would still be a decrease in impacts to bald eagle habitat. The 1,900 acres acquired by BLM could be managed with emphasis on bald eagle habitat, instead of being managed for maximum economic return. Benefits to bald eagle habitat would be realized by precluding mining on the 40-acre parcel.

The impacts to land status, uses, and use capability under Alternative C would be similar to those identified for Alternatives A and B. BLM would acquire the critical 40-acre state parcel with the exposed limestone outcrop, as well as additional state lands within the ACEC. The 840 acres of public lands adjacent to the ACEC that contain limestone would not be available for exchange. That limestone would remain in place and be unavailable for use. There would be an improvement in management efficiency in the area where state and BLM lands are consolidated. The state would continue to manage the state lands in the ACEC that area leased by the Eagle Ridge Ranch Company. However, the state has indicated that this alternative would "adversely effect (sic) manageability of remaining state land and would be rejected under Board rules." The state further commented that "it is immaterial who leases the state land; all leases contain, and are granted under, the "express condition that should the lessor hereafter find it to be in the best interest of the lessor to exchange the land embraced in this lease for other lands, as provided by law, then this lease may be terminated by giving the lessee one (1) year's notice . . .," and says this alternative is nonviable (Schrinar 1991).

Impacts to the grazing lessee under Alternative C would be similar to those described for Alternative A. The exception is that state lands leased by Eagle Ridge Ranch would not be acquired by BLM, so no change in that lessee's grazing authorization would result.

In terms of impacts to other wildlife resources, Alternative C would be similar to Alternative A, but with less state lands coming into BLM administration fewer management actions to benefit habitat would occur. Limestone mining would not occur on the public lands within the ACEC or the 840 acres adjacent to the ACEC. Impacts to other wildlife habitat, described in the "Mineral Materials" section, would not occur under this alternative. However, mineral material development could occur elsewhere around the ACEC with similar impacts to this proposed limestone quarry. Those state lands, and private lands not included in conservation easements, would be available for maximum economic return.

Since BLM would not acquire any commercial forestlands, no impacts to commercial forestry resources should result from Alternative C. Opportunities for prescribed burns that could be available under Alternative A to benefit the wildlife and timber resources would not be realized under Alternative C.

Current difficulties arising in wildfire suppression from the intermingled land pattern would continue. However, agreements with landowners and other agencies could minimize impacts to fire suppression efforts.

Under Alternative C, limestone mining and other activities could occur on some lands adjacent to the ACEC but not on the identified 840 acres. Lands inside the ACEC would not be mined. It is assumed that state of Wyoming minerals would be available for leasing anywhere within or adjacent to the ACEC, and that mining would occur on these lands if legal access could be obtained. This would result in an irretrievable loss of the mineral resource (limestone) on both federal and state of Wyoming lands, both inside (state lands only) and outside (state and federal) the ACEC. State lands made available for mining would allow the state to receive compensation for the use. Likewise, if public lands were mined, BLM would receive compensation for the mineral extracted.

Visual impacts in the immediate vicinity of Jackson Canyon that could occur under Alternative A would be greatly reduced or eliminated under Alternative C. If mining occurred on other public lands near, but outside the ACEC (and not on the identified 840 acres), visual impacts such as those identified under alternatives A and B could result in the area of the mining.

FORESTRY

Alternative A

An active commercial timber harvest would be carried out in the Little Red Creek area on approximately 850 acres of the 1,323 acres of commercial base, with a planned harvest of approximately 3,450 mbf over a five-year period. Timber management actions would be prohibited during the period from November 1 through March 31, and are subject to protection of bald eagle habitat.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Although only 163 acres of commercial base lands have commercial timber or can be accessed, under Alternative A, BLM would be required (under budget & appropriation procedures) to keep approximately 850 acres of timber available for commercial harvest. The timber would be considered part of the resource area's "commercial base" (or quota), requiring that timber be harvested by commercial timber sales. Although a site-specific plan for such harvest would be required, and mitigating measures identified, some potential benefits and impacts can be identified here for the lands presently available as commercial base.

Commercial timber sales could be used to meet ACEC forest stand and bald eagle habitat objectives. Combining removal of mountain pine beetle-infested trees with timber sales could result in protection of roost trees from infestation, improve the growth potential of timber stands in the roosts, and promote stand health and vigor making them less susceptible to beetle infestation. Using commercial harvest to remove pine beetle-infested trees could reduce the possibility of further infestations in adjacent private, state, and federal timber, and would upset the conditions optimum to beetle survival.

Since timber harvest activities would not occur during winter, there would be no direct impact to bald eagles approaching or within the roosts. Harvest operations could be planned to avoid impacts to the roosts, but there remains a possibility of fires being caused by harvest or slash disposal operations. Impacts to roost buffer habitat may occur directly from harvest operations if thinning nearby stands affects the microclimate of the roosts. As a network of roads and trails is developed for timber harvest, the subsequent use of those access routes would have impacts on bald eagle habitat, as discussed in the "Access Alternatives" sections.

To effectively harvest timber commercially, mainline and secondary access roads, trails, and skid paths would be needed. "Mainline" roads would be heavily used for a up to five years. Secondary roads would have more limited use, and the amount of disturbance would vary in accordance with the area they service. Secondary roads and trails would be pioneer paths without benefit of grading or leveling. Skid paths would result from individual tree removal to access road points and should result in minimal vegetative and soil disturbance. The impacts of improved road conditions and availability in the ACEC are discussed in the "Recreation" and "Access" sections.

Construction of new roads, improvement of existing trails, and use over the five-year period will disturb native vegetation, and result in some loss of soils through erosion. In addition to impacts to soils from roads that would be needed under Alternative A, soils on 850 acres would be disturbed by timber cutting and removal (skidding) equipment used to harvest the timber. Residual soil impacts should be few and last for less than 30 years. These consist mainly of marks left by roads, skid trails, and in-roads made to secure individual trees. Compaction of soil on these routes may be one of the longer lasting impacts, but should fade in varying degrees over time.

Commercial harvests required under Alternative A would change 163 acres of mature pine stand to a thinned stand; about half of the trees would be removed. Some wildlife species would benefit, and others would be impacted from the change in habitat. The quality of hiding cover would be reduced for turkey, deer, and elk, and the stand's suitability for forest hawks (accipiters), who focus on mature or old-aged stands, is reduced. The opening of the canopy, and removal of competition between trees, would result in an increase of forbs, grasses and shrubs, and a related increase in foods for some animals. Animals who feed on forbs, grasses, shrubs, or insects would be more abundant in this vegetation (nectar gatherers such as hummingbirds). Likewise, the food source would decrease for accipiters, woodpeckers, nuthatches, creepers (feeders on bark, cones, foliage or insects found on those), and animals that hunt in denser stands. Again, the increase in access resulting from timber harvest operations may be a major impact to wildlife.

Slash piles could prove beneficial to certain small mammals in the area. However, during the periods that slash materials remain on the ground after timber is harvested and before slash piles are burned, livestock and wildlife forage opportunities could be reduced. Livestock and wildlife travel throughout the harvested area would be impacted for short periods by slash piles.

Timber harvest could be designed to control mountain pine beetle infestation. In addition, stands could be thinned to a 40- to 60-square feet basal area in Little Red Creek. Many effects resulting from the harvest should be beneficial. The number of stems per acre would be reduced, allowing more growing space for the remaining trees. Unavoidable adverse impacts would result when harvested trees fall on healthy understory trees. However, this should not occur too frequently due to "leave tree" spacing.

Considerable slash would result from harvest, leading to an increased fire hazard following harvest. The size and location of slash piles can be controlled in commercial timber sales, and those piles can then be burned when snow is on the ground to lessen potential fire hazard. However, during some years there may not be sufficient snow on the ground to allow burning of slash piles before November 1. This would result in leaving the piles until a following year when snow is present. After slash is disposed of, the fire hazard should decline until normal fire expectancy occurs about five years after harvest and slash disposal.

Under Alternative A, the area could be selectively logged to ensure that visual impacts are moderate. Piled slash creates a visual impact, but as the piles are burned shortly after harvest operations the impact should lessen. After five years a "naturalness" would set in. Timber harvesting necessarily injects on element of unnaturalness into the area for a short period of time. However, this is not major. Over 30 to 60 years, the area would regain its natural look, and on the long term, visual results would be a more attractive, open-spaced stand.

During the five-year timber harvest operations, air pollution would result from vehicular exhaust, dust disturbance on roads, and chainsaw emissions, on a seasonal, short duration basis. The burning of slash and beetle-infested trees would result in airborn smoke in the immediate area of the burn. The visual quality of harvested areas would be changed from one natural in setting to one with signs of human activity. Initially, roads could be very obvious to viewers, and some evidence of the mainline roads may be evident after reseeding and even after trees regenerate. With time the visual intrusion should fade and become difficult to identify.

Alternative B

> The acreage and volume identified for timber harvest within the ACEC, including the 163 acres of remaining forest, would be removed from the BLM's commercial base. No timber would be harvested for commercial purposes from the ACEC, but it would be actively managed within the ACEC to achieve species diversity and obtain healthy aged and structured stands for the benefit of bald eagle roosting habitat.

Implementation of Alternative B could not be undertaken unless the RMP was amended to change the current allocation of the forest resources. This alternative, although not inconsistent with state and local planning, is not in conformance with RMP decisions. Land use decisions and RMU management prescriptions specific to this alternative that would require amendment include F2, ROD p. 12 and RMU8, ROD p. 59. Other decisions listed in the "Introduction" section of this HMP may also require amendment.

Under Alternative B, BLM would not be required to make any timber in bald eagle habitat areas available for commercial harvest. This alternative would allow the commercial base classification to be changed to forestland on 1,373 acres, and would eliminate the resource area's obligation to meet unfeasible budget assignments. Sales of forest products could still be done when needed to improve the forest stand composition, specifically to achieve bald eagle habitat objectives, but not to meet allowable cut quotas.

Practices, including non-commercial timber harvests, could be undertaken to improve timber in the ACEC to benefit bald eagle habitat. Timber harvest areas could be located away from the roosts, but roads could still be located near the roosts (especially at the Little Red Creek roost). Winter operations would not occur, but access on the roads might continue and directly impact bald eagles on or approaching the roosts. Improved access provided from harvest operations, and people who participate in harvest operations then become familiar with and return to the area, are the potential impacts to bald eagles using the roosts.

Timber management actions could be planned so that the density of stands near the roosts would not impact bald eagles or the microclimate. There is some danger of wildfire from harvest operations, especially slash disposal, and from future, unassociated recreation uses.

Removing forested lands in the ACEC from the allowable cut base would affect 1,373 acres of commercial forestlands, an 18% reduction in the resource area's allowable cut acreage base. Since all but 163 acres is physically unavailable, the unattainable quota would no longer be included in the resource area's budget priorities. The resource area's required contribution to the BLM Casper District's timber harvest would be reduced. The short-term consequences would not be noticeable, since most (1,210 of 1,373 acres) of the ACEC forestlands are presently unsuitable for harvest.

In 80 years in the Little Red Creek area, 690 acres could be ready for harvest, but on 606 acres in the ACEC, and 77 acres at Coal Mountain the stands are inaccessible unless new access roads are constructed. With RMP slope restrictions, roads could not be constructed to those areas and they would remain unavailable for harvest.

The impacts to other wildlife habitat would be similar to those resulting under Alternative A, but of less magnitude assuming that less or no acreage would be harvested.

FIRE MANAGEMENT

Alternative A

> All federal lands in or adjacent to the ACEC would be priority full suppression zones. Wildfire priority full suppression would include using vehicles on existing roads and trails, air support, and construction of roads and firebreaks. To the extent possible, trees would not be cut within 200 yards of the roosts.
>
> Cooperative agreements would be pursued and an initial attack plan would be established. Prescribed burning would be implemented where necessary, but it would not be allowed from November 1 through March 31.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, there would be no restrictions on the use of existing roads and trails for fire suppression, and heavy equipment could be used to construct access or firebreaks. An initial attack plan could be established cooperatively with other entities which would provide guidelines for use in preparation of an escaped fire situation analysis plan if a fire occurred in the ACEC. This alternative would also allow for prescribed burning within the ACEC.

No direct impacts to bald eagles are likely, since wildfires usually do not occur during the winter. It is possible, but not likely, that a fire would occur during November or early December. Creating firebreaks around the roosts could reduce the chances that wildfires in the buffer areas or outside the ACEC would reach or destroy the roosts. It is possible that trees that would be used by bald eagles in the future as roost trees could be removed within the firebreak areas. Natural regeneration of trees on firebreaks would take 15 to 20 years; mature trees would not be expected for 60 to 80 years.

Without an initial attack plan, roosts could be directly affected by firefighters felling or damaging roost trees, or creating firebreaks within the roosts. An initial attack plan could be used to minimize impacts to bald eagle habitat during fire suppression. Many of the roosting trees are on steep slopes, often with a short cliff of rock at the top, which would prevent heavy equipment from operating at the roost. A concern would be that roads or firebreaks constructed during fire suppression would later be used for access to the roosts until rehabilitation of disturbed areas was successful.

In the long term (50 to 200 years) this alternative provides the highest opportunity for protecting forest resources from wildfire, and affords the highest degree of protection from wildfire. The acreages burned and the potential for escaped fires would be at a minimum. Suppression costs and damage to vegetation, timber and soils, and rehabilitation requirements and costs would be the highest. This alternative requires extensive preplanning and coordination with other fire departments providing initial attack service in the area.

There is a risk of prescribed fires getting out of control so that habitat near the roosts and the roost trees could be damaged or destroyed. The number of trees that could carry a fire into the crowns is presently high in parts of the two roosts.

Lasting impacts to other wildlife habitat are not anticipated. Short-term impacts would result from actions such as driving trucks on existing trails and cutting trees, but these are not as severe as the damage fires could cause. More long-term impacts would result from other fire suppression actions such as building trails or access roads.

Alternative B

> All federal lands in or adjacent to the ACEC would be priority full suppression zones. Wildfire priority full suppression would include ground crews and air support, vehicle use of existing roads and trails, but not construction of roads or firebreaks. To the extent possible, trees would not be cut within 200 yards of the roosts.
>
> Cooperative agreements would be pursued to establish an initial attack plan. Prescribed burning would be implemented where necessary, but it would not be allowed from November 1 through March 31.

Alternative B is in conformance with the RMP, and is not inconsistent with state and local planning.

Alternative B would allow similar actions as those identified for Alternative A. The exception is that under Alternative B, construction of access or firebreaks would not be allowed.

With no roads or firebreaks constructed within the ACEC, there would be less chance for pedestrian or vehicular travel to the roosts, and impacts to bald eagle habitat from that use could be less than those described for Alternative A. However, not allowing firebreaks around the roosts could increase the chances that wildfires would reach buffer areas or reach and damage or destroy the roosts. There is increased potential that roost trees could be lost in a wildfire.

Under Alternative B, impacts to other wildlife habitat are similar to Alternative A, but less disturbance to habitat would result since new roads would not be constructed.

The limitations on constructing roads and firebreaks would increase the risk during the long term (50 to 200 years) of large losses of forest resources from a wildfire. In the short term, there is not a large risk of losing forest resources since past commercial harvest and wildfire have removed much of the available fuel from the Little Red Creek area (on 690 acres).

The prohibition on use of heavy equipment for fire suppression would create a higher potential for large fires to result from escapes at initial attack. Suppression damage and costs, and rehabilitation requirements and costs, would be at a minimum. This alternative affords the least degree of protection from wildfires. This alternative requires extensive preplanning and coordination with other fire departments providing initial attack service in the area.

Alternative C

> All federal lands in or adjacent to the ACEC would be priority full suppression zones. Wildfire priority full suppression would include ground crews and air support, and vehicle use of existing roads and trails. Construction of roads or firebreaks would be allowed only on the specified 880 acres where fires could present high risks to life and property. To the extent possible, trees would not be cut within 200 yards of the roosts.
>
> Cooperative agreements would be pursued to establish an initial attack plan. Prescribed burning would be implemented where necessary, but it would not be allowed from November 1 through March 31.

Alternative C is in conformance with the RMP, and is not inconsistent with state and local planning.

Alternative C is similar to Alternative A, but under Alternative C construction of access or firebreaks would be allowed in certain portions of the ACEC.

Impacts to bald eagle habitat under Alternative C fall between Alternatives A and B. With disturbance from fire suppression prohibited in the roosts, damage from suppression efforts should be minimal. The threat of fire damaging the roosts is similar to Alternative A but is lessened by allowing construction of fire breaks or roads to suppress fires before they reach the roosts.

Impacts to other wildlife habitat is intermediate between Alternative A and Alternative B.

This alternative is intermediate, and close to Alternative B in risk of large losses of forest resources due to wildfire. The building of roads or firebreaks within permitted areas could improve the success of fire suppression efforts in areas where personal property may be threatened, and it could provide protection of private and state resources outside the ACEC.

This alternative represents the median level of protection from wildfire by allowing the use of heavy equipment in certain areas. The prohibition against cutting down trees to control a fire would result in a higher potential for escaped fires. This alternative requires extensive preplanning and coordination with other fire departments providing initial attack service in the area.

MINERAL MATERIALS

Alternative A

> Mineral materials located on public lands outside the ACEC boundary in T. 32 N., R. 80 W., sections 27, 28, and 34 (840 acres) would be available for extraction of limestone or other salable minerals. These lands will be offered to the state of Wyoming in exchange for State lands in the ACEC; failing that, BLM would develop/administer the minerals under this alternative. Mineral material extraction and exchange would be subject to the seasonal restriction for occupancy and road use.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, public land outside the ACEC would be available for mineral material sale by BLM if the exchange with the state of Wyoming does not occur. The mineral materials could be extracted from the lands. Roads and other developments needed for removal of the limestone could be constructed and operated, but no surface occupancy would be allowed from November 1 through March 31. If an exchange is consummated, the state of Wyoming would be responsible for enforcement of seasonal restrictions.

Bald eagle habitat could be affected by access to the ACEC and activity at the border of the ACEC. Access to the ACEC is a concern unless there is an effective barrier such that winter access into the ACEC is prevented. The local experience is that BLM has not had much success in keeping people out of areas. In the past on nearby Muddy Mountain, barriers have often been by passed (or locks destroyed) partially due to a lack of BLM personnel to consistently patrol closed areas. If restrictions on access were not effective, then people or vehicles could get into ACEC and possibly to the roosts. This would cause visual and sound impacts to eagles approaching or at the roosts, but it probably would not directly impact the roost habitat. If the ACEC boundary does not provide a sufficient buffer, then there would be impacts to eagles seeing or hearing these activities while approaching or sitting in the roosts. These impacts would be avoided if the seasonal restrictions under this alternative are effectively implemented.

Activity at the ACEC border would not be a disturbance to eagles if the concept of an appropriate buffer is true; that is, if the existing boundary is sufficient to provide for no disturbance to eagles from activities outside the boundary. There may be some areas where the ACEC boundary, and therefore the buffer, are not adequate. For instance, the top of the ridge located 1.3 miles from the Little Red Creek Roost is in line of sight to that roost. In such cases, certain actions may cause sound or visual disturbances to eagles traveling to or roosting in the ACEC.

If the exchange were completed, 840 acres of public land would become state lands. The impacts to land status are discussed in the "Exchange" section.

Under alternative A, the ACEC boundary would not change, and mineral material (limestone) extraction would be allowed on lands outside the ACEC boundary. Whether remaining under BLM management, or exchanged to the state, mining and access would be subject to a no surface occupancy stipulation from November 1 through March 31. Limestone mining could occur, resulting in an irretrievable loss of the mineral resource at the mine site; once extracted, the limestone cannot be replaced.

As discussed in the "Affected Environment" section, the 80 acres located in T. 32 N., R. 80 W., section 34, N½SE¼, could support a limestone quarry for 20 years. It is reasonable to expect that under Alternative A a limestone quarry approximately 80 acres in size would be present adjacent to the ACEC boundary on the lower western slopes of Coal Mountain. However, the quarry size would depend upon demand of the local market for such material.

If limestone mining is undertaken under this alternative, grazing operations could be affected. Livestock grazing is unlikely to occur on an area being actively mined, so whatever acreage is dedicated to a quarry would not be available for livestock forage. The AUMs lost to mining activities would have to be removed from the grazing lease until the quarry was abandoned and the acreage revegetated to its existing condition. If an 80-acre quarry on the lower western slopes of Coal Mountain were developed, approximately 4 AUMs in the Eagle Ridge Ranch allotment, constituting 0.5% of total AUMs, would be unavailable until successful revegetation is achieved.

Disturbance to other wildlife habitat would be limited to the area of the mine and roads, and except for loss of forage, would occur only during summer. The only known sensitive habitat which might be disturbed by summer activities in or adjacent to the ACEC is a prairie falcon nest. In winter, the only impacts would be those associated with unauthorized access as discussed in the "Access" and "Recreation" sections.

No impacts to timber resources should result under Alternative A. Should mining or associated operations start a fire, the mine operator would be responsible for initiating suppression, and would likely be responsible for any or all suppression costs incurred by federal, state, or local agencies. The probability of such a fire spreading to the ACEC is low. Improved access resulting from quarry development could provide barriers to the spread of wildfires into or out of the ACEC, and could facilitate control of fires in or adjacent to the ACEC. However, if access was not restricted, increased recreation use (summer or winter) would increase the potential for human-caused fires in or adjacent to the ACEC.

Impacts associated with an 80-acre limestone quarry include noise and dust from drilling, blasting and ripping rock, and crushing, stockpiling, and hauling the materials. Access road maintenance, with associated dust and noise from the activities, would also occur. Equipment typically used in quarry operations include drill trucks for drilling blast holes, bulldozers for ripping and moving rock, a primary crusher and conveyors, front-end loaders, road graders, generator vans, and water trucks. It has been noted that drilling and blasting may not be required because it may be possible to rip the material with a large bulldozer.

It is assumed that all 80 acres of potential quarry would be disturbed in some fashion. Any mining activities would be subject to mitigating measures developed through a site-specific EA. Under this alternative, stipulations would include but not be limited to a requirement for no surface occupancy from November 1 through March 31 on a yearly basis. If the lands are not exchanged to the state, mining activity would be guided by BLM's EA and the mine plan, which would be part of the EA. Operations would be monitored and administered by the BLM, and compensation made to the U.S. for mineral materials mined under this alternative. If the lands are exchanged, the state would be responsible for analysis of any mining proposal, monitoring, and administration of any mine permit issued (including enforcement of the seasonal occupancy patent restriction), and the state would collect any monetary compensation due as a result of a mining operation.

Reclamation would take place either concurrently or at the conclusion of mining operations. Reclamation would consist of highwall reduction, recontouring to provide thorough drainage, topsoiling and revegetation of all disturbed areas. The operation would be bonded for reclamation and performance by the Wyoming Department of Environmental Quality (DEQ).

If mining were authorized, the visual quality of the immediate area could deteriorate. Varying levels of vegetation and soils removal could be anticipated in association with mining development as well as increased airborne dust in the area. These changes would degrade the natural conditions in the environment of Jackson Canyon, Little Red Creek, and the Muddy Mountain area. Mining development would alter the character of the area from relatively natural and undisturbed to more intensively developed and used. However, the visual intrusions would not exceed acceptable limits for modification of the landscape under visual resource management objectives.

Analysis of the potential visibility of a quarry on the limestone-bearing lands was performed using BLM's Map Overlay Statistical System. The computer-generated map overlay shows that the limestone formation and quarry site can be seen from one point on the Coal Mountain Road and one point on highway 487, approximately 2 and 5 miles, respectively, to the southwest of the site. The subject acreage is also visible in three areas over approximately ½ mile of the Circle Drive Road 2½ miles to the southeast. Development of a typical mining operation on the subject acreage would be visible from only one point within the ACEC, that being just north of the Circle Drive Road in the extreme south. A quarry could also be visible from the western end of Muddy Mountain (southeast of the ACEC), but not visible from the main road to Muddy Mountain.

Travelers on highway 487 would have to purposely look for the limestone formation and quarry to be able to view it from the highway. The same is true from the Coal Mountain Road. A quarry could be more easily viewed from Circle Drive and from undeveloped portions of Muddy Mountain. Quarry development would not exceed acceptable limits of intrusion into the visual quality of the area, and impacts to visual quality from the viewpoints is low. Factors considered in reaching these findings include the remoteness of the area, and the few people that go to the area and would have an opportunity to view the site from the identified viewpoints.

Alternative B

> The ACEC boundary would be revised to include public lands in T. 32 N., R. 80 W., sections 27, 28, and 34 (840 acres), and extraction of the limestone or other salable minerals on those public lands would be prohibited.

Implementation of Alternative B could not be undertaken unless the RMP was amended to commit the 840 acres to ACEC management, and to change the ACEC boundary. This alternative is not inconsistent with state and local planning.

Under Alternative B, the boundary of the ACEC would be enlarged by approximately 840 acres, and extraction of mineral materials would not be allowed on those lands included in the ACEC boundary.

Impacts to land status are discussed in the "Exchange" section. No impacts to existing land uses are anticipated. Alternative B would prevent any impacts from mining activities on the 840 acres.

It is possible that mining for other minerals could occur outside the enlarged ACEC boundary, or that development of private or state minerals within the ACEC could occur. If so, the impacts to bald eagle habitat would be similar to Alternative A, but there would not be a winter restriction upon the activities. Depending on the location of mining outside the ACEC, the impacts to bald eagle habitat should be less than those identified for Alternative A. Impacts to other wildlife habitat would be less than under Alternative A.

With federal minerals made unavailable under this alternative, the likelihood of development of minerals on the 40-acres of state land on Little Red Creek increases. These lands in the ACEC are closer to critical bald eagle habitat, and development of a limestone quarry could directly impact eagles using the roosts. This is discussed in the "Exchange" section.

No impacts to timber resources are anticipated. Any potential for a mine-related fire on the 840 acres or human-caused fires resulting from increased access would be eliminated.

Under alternative B, mining and extraction of limestone would not occur on the 840 acres as all minable reserves would be within the ACEC. The reserves would remain physically intact, but use as a mineral commodity would not be allowed. Since mineral material would not be mined, there would be no physical impact to the area from mining. Receipt of monies by BLM or the state from mining of mineral materials would not occur.

Visual impacts in the immediate vicinity of the ACEC that could occur under Alternative A would be greatly reduced or eliminated under Alternative B. If mining occurred on other lands near, but outside the ACEC (and not on the identified 840 acres), visual impacts such as those identified under Alternative A could result in the area of the mining.

Alternative C

> The ACEC boundary would be enlarged by approximately ¼-mile to the south using topographical features to screen bald eagle roosts. Mineral materials located outside the revised boundary would be available for extraction of limestone or other salable minerals subject to the seasonal restriction on surface disturbance or occupancy on roads or sites.

Implementation of Alternative C could not be undertaken unless the RMP was amended to commit the additional acreage to the ACEC, and to change the ACEC boundary. This alternative is not inconsistent with state and local planning.

Under Alternative C, the ACEC boundary would be enlarged, and limestone present in the lower portion of the ridge could be extracted from the lands. Roads and other developments needed for removal of the limestone could be constructed and operated subject to seasonal restrictions.

Impacts to bald eagle habitat under this alternative would be similar to those of Alternative A. However, impacts to bald eagles approaching or at the roosts could be reduced. Alternative C results in the distance from the nearest possible quarry to the Little Red Creek Roost being 1.5 miles. The ridge is 140 feet higher than the roost, and would serve as a barrier between the quarry location and roost. Actions not screened by the ridge on private or state minerals within the ACEC, and on federal minerals adjacent to the ACEC boundary, could still disturb bald eagle habitat or eagles approaching or at the roosts.

Impacts to land status are discussed in the "Exchange" section. If the ACEC boundary were moved ¼ mile southward, any proposed limestone quarry would have to be located in the lower portion of the western slope of Coal Mountain. Less acreage would be available for mineral materials extraction, and resulting disturbances to soils and vegetation could be reduced accordingly. Less material could be mined, and less money would be realized from the mining.

If limestone mining is undertaken under this alternative, grazing operations could be affected. Livestock grazing is unlikely to occur on an area being actively mined, so whatever acreage is dedicated to a quarry would not be available for livestock forage. The AUMs lost to mining activities would have to be removed from the grazing lease until the quarry was abandoned and the acreage revegetated to its existing condition. As identified under Alternative A, an 80-acre quarry would reduce grazing by 4 AUMs, or 0.5% of the total AUMs in the Eagle Ridge Allotment. Impacts to other wildlife habitat would be less than those identified for Alternative A, but greater than those for Alternative B.

No impacts to timber resources should result under Alternative C. Should mining or associated operations start a fire, the mine operator would be responsible for initiating suppression, and would likely be responsible for any or all suppression costs incurred by federal, state, or local agencies. The probability of such a fire spreading to the ACEC is low. Improved access resulting from quarry development could provide barriers to the spread of wildfires into or out of the ACEC, and could facilitate control of fires in or adjacent to the ACEC. However, if access was not restricted, increased recreation use (summer or winter) would increase the potential for human-caused fires in or adjacent to the ACEC.

Impacts associated with a limestone quarry south of the ridge would be similar to those described for Alternative A and include noise and dust from quarry construction and operation, and hauling the materials. Any mining activities would be subject to mitigating measures developed through a site-specific EA. Under this alternative, stipulations would include but not be limited to no occupancy from November 1 through March 31 on a yearly basis. Mining activity would be guided by the EA and the mine plan, which would be part of the EA. Operations would be monitored and administered by the BLM, and compensation would be made to the U.S. for mineral materials mined under this alternative.

Reclamation would take place either concurrently or at the conclusion of mining operations. Reclamation would consist of highwall reduction, recontouring to provide thorough drainage, topsoiling and revegetation of all disturbed areas. The operation would be bonded for reclamation and performance by the Wyoming DEQ.

If mining were authorized, the visual quality of the immediate area could deteriorate but is not anticipated to exceed acceptable limits. Visual impacts are discussed in detail under Alternative A.

ACEC BOUNDARY ADJUSTMENT

> The existing ACEC boundary would be enlarged approximately ¼ mile south, and mineral materials located outside the revised boundary would be available for extraction of salable minerals without seasonal or occupancy restrictions (map 18).
>
> The existing ACEC boundary would be moved to the township line between Range 79 and 80 West in the eastern portion of the ACEC (map 18).

This alternative is not inconsistent with goals and objectives set in the RMP nor is is inconsistent with state and local planning. Implementation of this alternative could not be undertaken unless the RMP was amended to change the current ACEC boundary to commit the additional acreage to ACEC management and eliminate acreage from ACEC management.

Changing the boundary of the ACEC would expand the area on the southwest by including approximately 285 acres of federal land and 80 acres of state land. The area on the east boundary would be reduced by removing 35 acres of federal land and 914 acres of private land from the ACEC.

Expanding the boundary to the southwest of the ACEC and reducing the boundary to the east of the ACEC would increase the overall acreage of public land subject to ORV restrictions by 245 acres. ORV route designations (map 17) would not change as a result of the boundary expansion. Impacts associated with ORV restrictions, as discussed in the "Recreation" section, would increase on the added federal lands and be eliminated on the federal lands removed.

By changing the ACEC boundary to add federal lands, this alternative would also increase the area subject to restrictions on access road use and construction and on right-of-way authorizations. No significant change in terms of restricted access is expected in this regard. However, the expansion of access restrictions to additional lands would have a "ripple down" effect on oil and gas exploration and development, timber management, and recreational and other land uses on the added lands. More federal land would be included in the management alternatives for these resources under this alternative. The environmental consequences of those alternatives applies to the added federal lands.

Under this alternative, public land outside the boundary would be available for mineral material sale by BLM if an exchange with the state of Wyoming does not occur. The mineral materials could be extracted from the lands, and roads and other developments needed for removal of limestone could be constructed and operated without applying seasonal occupancy restrictions. If an exchange were consummated, the state of Wyoming would acquire the lands without restrictions attached to the patent.

As indicated in the "Affected Environment" and "Mineral Materials" environmental consequences sections, it is reasonable to expect that a limestone quarry approximately 80 acres in size would be developed adjacent to the expanded ACEC boundary on the southwest-facing slopes of Coal Mountain.

Other than the effects just discussed, the environmental consequences of enlarging the ACEC on the southwest are discussed first, followed by a discussion of the consequences of reducing the ACEC at the eastern boundary.

The distance from the enlarged boundary line (and therefore the nearest possible quarry site) to the Little Red Creek roost is 1.6 miles, and the elevation of the ridge is 100 feet above the boundary. The ridge would serve as a barrier between the quarry site and the Little Red Creek roost. The distance from the quarry site northwest to the Jackson Canyon roost would be about 3 miles, and the ridge top there is the same elevation as a quarry would be. The roost is approximately 300 feet in elevation below (and behind) the ridge. A quarry site outside the ACEC would not be visible from either roost inside the ACEC.

Bald and golden eagles flying to or from the Little Red Creek roost may see the developments and hear activities from the flyway. Eagles in the major flyway to the Little Red Creek roost would have to be about 1,000 feet above the ground in the flyway to see quarry activity due to the slope of the ridge above a possible quarry site. It has been reported (Cole 1991) that some eagles fly directly over the ridge below which a quarry could be located.

Without seasonal occupancy restrictions on lands outside the enlarged boundary, quarry operations such as blasting and use of heavy equipment could occur during the winter when bald and golden eagles are using the roosts in the ACEC. As indicated above, these activities would not normally be visible to the eagles using the roosts, but the noise from these operations must be considered.

The A-weighted sound level (dBA) system of measurement of the loudness of noise has been used extensively in the U.S. A decibel is the unit of sound pressure commonly used to measure airblast from explosives; the decibel scale is logarithmic (USDI 1987). The distance from the sound source is a major determinant in the perception of various sounds. Noise drops off 6 dB(A) for every doubling of distance from the source (USDI, OSMRE 1991). The psychological property of a sound called 'loudness' is connected with the 'intensity' of a sound wave. In general, the relation between the loudness of a sound and its intensity is not simple; loudness cannot be measured in physical terms, since it depends on the ear and judgment of the individual observer (USDI, BLM 1992).

Information in the following table relates A-Scale decibel readings and some of the sounds of daily life (USDI, BLM 1982[a], 1992).

Decibels	Equivalent Sounds	How it Sounds
10	Leaves rustling	
40	Bird calls	45 dB(A) - approx. 1/8 as loud as 75 dB(A)
70	Vacuum Cleaner; Passenger Car, 65 mph (25 feet)	75 dB(A)
90	Diesel Truck; Power Lawnmower	85 dB(A) - approx. 2 times as loud as 75 dB(A)
100	Diesel Engine for Exploratory Drilling	105 dB(A) - approx. 8 times as loud as 75 dB(A)
110	Scraper/Loader, Unmuffled Motorbike (2 to 3 feet)	115 dB(A) - approx. 16 times as loud as 75 dB(A)
130	Chainsaw, Jet Engine (75 feet)	135 dB(A) - approx. 64 times as loud as 75 dB(A)

Source: USDI, BLM 1982[a], 1992

At a quarry, noise levels could be about 70 decibels for heavy trucks to 110 decibels for a scraper/loader. Noise levels from blasting explosives at granite and limestone quarries could be from about 120 to 135 decibels at 720 to 1,750 feet in front of the blast site (Du Pont 1977).

In addition to factors such as type and amount of explosive, depth of charges, and the amount of fill in the drill holes, the levels of noise from blasting is affected by atmospheric conditions, general surface terrain, and the type and depth of overburden (USDI 1987). Atmospheric conditions, primarily temperature and wind speed, determine the speed of sound in air at various altitudes and directions, and affect how sound waves travel. Under optimum conditions, sound waves are refracted away from the earth's surface and noise levels decrease rapidly with distance. Sound waves may be bent (refracted) toward the earth's surface under certain temperature and wind conditions. In addition, noise levels decrease more slowly with distance under temperature inversion conditions.

Changes in sound velocity may also be caused by wind as well as temperature gradients. Highly directional downward winds increase noise in a downward direction, and highly directional upward winds decrease noise in an upward direction. The effects of wind on noise levels are generally greater in colder months due to higher wind speeds that time of year, and blasting done in early morning usually results in louder noise levels. Early morning temperature inversions are usually eliminated by mid-morning, but near sunset the cooling surface temperatures can again cause inversion conditions.

Although specific details outlining what equipment and blasting operations may be undertaken at this possible quarry site are not available, the effects of other kinds of activities near bald eagle roosts were analyzed for comparison. In a study of the effects of an oil and gas exploratory drilling operation 0.6 mile northeast of one roost and 2.75 miles southwest of another roost, it was concluded the rig had little to no direct effect on roosting eagles (Bagdonas et. al. 1985). The oil and gas drilling operation did not include blasting, so that effect was not analyzed in the study.

In this area, two factors, a slope of moderate steepness (12%) and a southwest aspect of the ridge, would deflect noise from quarry operations and blasting away from the ridge and the Little Red Creek Roost. The southwesterly prevailing winds during winter could combine with other factors to carry the noise back toward the ridge. Therefore, some noise from the quarry operation could occasionally reach and be heard by bald and golden eagles in the roost. There is higher potential for disturbance of eagles in the roosts from abrupt, loud noises during the early morning and evening hours when eagles have not yet departed the roost for feeding areas or are returning from those areas to the roost. This potential impact can be mitigated if blasting is not performed during those early morning and evening hours.

State and federal agencies, such as the Wyoming Department of Environmental Quality, the State Mine Inspector, the Mine Safety and Health Administration, and the Occupational Safety and Health Administration, regulate and control use of explosives and blasting. Restrictions on blasting during the early morning and evening hours is consistent with generally accepted industry standards. These identify that favorable conditions for blasting are clear to partly cloudy skies with fleecy clouds, light winds and a steadily increasing surface air temperature from daybreak to blast time. Blast time should be delayed to midmorning to allow early morning temperature inversion, if any, to be eliminated. Unfavorable blasting conditions are identified as foggy, hazy, or smoky days with little or no wind (typical of temperature inversion); during strong winds accompanying passage of a cold front; during periods of the day when surface temperature is falling; too early in the morning or after sunset on clear days with very light winds; and, cloudy days with a low ceiling, especially when there is little or no wind (Atlas 1987).

If timing of blasting operations is restricted as outlined above, it is unlikely that any noise that might reach the roosts, or that the sight and sound of mining disturbances near the flyway into the roosts, would be significant enough to cause the eagles to leave the area. The FWS and WGFD comments favor application of restrictions that require blasting be done only from 10 a.m. to 2 p.m. November 1 through March 31. Given industry standards, this should not impose hardships on quarry operations. Therefore, the BLM anticipates that any possible impacts to bald eagles at the roosts would be insignificant. Further, as discussed in more detail in the "Flyways" section (alternative C), BLM has not identified that mineral material development conflicts with bald eagle use of flyways, so the level of impacts to bald eagles in the flyway is anticipated to be negligible.

If public access to the ACEC via a quarry road was not restricted, and people traveled into the ACEC during winter from the quarry site, the unauthorized traffic could cause eagles to flush from the roosts. Repeated disturbances at or near the roosts could eventually result in the eagles abandoning the roosts.

In terms of land status, and the state lands that BLM would like to acquire from the state, the exchange has been independent of a specific boundary, and expansion of the boundary should not affect exchange alternatives. BLM would still pursue acquisition of the state lands within or adjacent to the ACEC (exchange alternatives A or C) regardless of where the ACEC boundary is established.

Under exchange alternative B, BLM would pursue acquisition of only the 40-acre state parcel along Little Red Creek. Revision of the ACEC boundary near this parcel is not considered under this boundary alternative. On the other hand, expanding the ACEC boundary would reduce the acreage of BLM lands adjacent to the current ACEC that could be available for acquisition by the state under exchange alternative A. Expansion of the boundary would have no effect on acquisition by the state of BLM lands under exchange alternatives B and C.

If state lands within the ACEC boundary are acquired by BLM, they would not be available for disposal. If BLM lands outside the ACEC are not exchanged to the state of Wyoming, any development would be guided by mitigating measures developed through a site-specific EA. Stipulations on a quarry could include limitations on timing and duration of blasting and public access restrictions. Operations would be monitored and administered by BLM, and compensation for the materials mined would be made to the U.S.

Expansion of the boundary would decrease the total public land acreage withdrawn from location of mining claims under alternatives A and C in the "Other Minerals" section. All the mineral estate underlying the lands to be added is in federal ownership and most of the mineral estate under the lands to be removed is federal. Under the Boundary Adjustment Alternative, 10,648.60 acres of federal mineral estate would be withdrawn.

This alternative would make mineral materials outside the enlarged boundary available for development without seasonal restrictions. Impacts associated with an anticipated 80-acre quarry would include noise, dust, activity from drilling, blasting, crushing, and stockpiling the limestone. Equipment typically used in quarry operations include a drill for drilling blast holes, bulldozers for pushing and ripping rock, crushers, screens and conveyors, front end loaders, generators, road graders, water trucks, haul trucks, and service vehicles.

A typical mining sequence for this type of deposit, which is a thin (6- to 10-foot thick) plate at or near the surface, would entail stripping and stockpiling topsoil and overburden; drilling and blasting the limestone; removing the blasted rock; and, crushing it in crushers. The material could be processed to a finished product and stockpiled onsite, or it could be hauled to another location where it may undergo further preparation.

In this area, a typical quarry would consist of a pit floor where most of the processing equipment would be located; a working face (or highwall) where the rock is drilled, blasted, and removed; and, an area beyond the highwall which has been stripped in anticipation of the highwall advance. Areas for topsoil, overburden, reject material, and product stockpiles must also be set aside. A main access/haul road into a quarry large enough to accommodate anticipated heavy truck traffic would be constructed and maintained. Other small service roads and trails are usually constructed within a quarry, but are not permanent and would tend to move with the pit.

The main road into a quarry does not have to be available for public use. The operator could effectively prohibit access by closing the road with locked gates located where it is impossible to drive around the gates. Dust from quarry roads could be controlled by sprinkling with water or with a solution of magnesium chloride and water.

A possible quarry site under this alternative would be located a minimum distance of 0.25 mile below the ridgeline of Coal Mountain. This would ensure the site would not be visible to eagles occupying the Little Red Creek and Jackson Canyon roosts. However, the entire operation could be visible to birds leaving southwest from the Little Red Creek roost.

If limestone mining is undertaken under this alternative, grazing operations could be affected as discussed in the "Environmental Consequences" section for the mineral material alternatives. Disturbance to other wildlife habitat would be limited to the area of the mine and roads, and a loss of forage in these areas would result. The only known sensitive habitat which might be disturbed by summer activities is a prairie falcon nest, and the only winter impacts would be those associated with unauthorized access as discussed in the "Access" and "Recreation" sections. Impacts to timber resources and the fire management program as a result of ACEC enlargement are the same as identified in the "Mineral Materials" section, alternatives A and C.

If mining were authorized, the visual quality of the immediate area could deteriorate but is not anticipated to exceed acceptable limits. This is discussed in more detail in the Mineral Materials section, alternative A.

The change of boundary for the eastern portion of the ACEC would remove restrictions on development of the federal mineral estate under private and federal lands which are 0.75 mile or more east of the Little Red Creek roost. It is expected that most mineral development activities that could take place on these lands would have no impact on eagles in the roost or eagles flying in or out of it.

However, access could be improved by mineral development, which could result in more people traveling into the ACEC. It is possible that repeated disturbances at the roost would cause the eagles to abandon it. Mitigating measures on mineral activities could be applied to prevent repeated unauthorized travel to the Little Red Creek roost should that be a problem in the future. The FWS and WGFD have indicated that seasonal restrictions may be appropriate if federal minerals are developed in the future in this area. The WGFD and Wyoming Nature Conservancy have commented that strict enforcement of access restrictions would be necessary to avoid increased travel in the ACEC.

Another concern is noise and visibility to bald eagles of surface mining development if it occurred on the private surface/federal mineral lands removed from the ACEC. Similar impacts as those identified for a possible quarry near the expanded southern boundary could occur from mineral activity in this area.

Changing the eastern boundary would exclude the archery range from the ACEC, and eliminate it from ACEC ORV restrictions, particularly snowmobiling except as provided for in the approved plan of development for that R&PP. To a great extent, this would eliminate access to the archery range as an ACEC issue. Legal access to the archery range would still be required, but BLM approval of the access road should have little if any direct impact on the ACEC. Control of access beyond the archery range and into the ACEC from other roads and nonfederal lands would continue to be an issue needing management attention during implementation of this HMP. For the most part, this can be addressed by ACEC ORV designations, monitoring and enforcement, and restrictions on access roads and right-of-way authorizations on federal lands.

No impacts to the rights of private landowners would result from removal of lands in the eastern part of the ACEC. There is no change in private property rights from those existing while the ACEC boundary includes the private lands. This alternative changes no aspect of ownership and enjoyment of those private lands. The ACEC designation has no effect on the private property titles. This remains true with or without ACEC designation.

On the large block of private land to be eliminated from the eastern portion of the ACEC, the only land uses subject to BLM review are development of federal minerals underlying private or federal lands, and administration of the archery range R&PP. A block of federal lands conducive to a management unit does not occur until the township line is reached. West of that line, in addition to the blocks of federal and state lands, a significant portion of the private lands are included in conservation easements. These private lands are adjacent to the federal and state lands. Some private lands not included within these easements are adjacent to federal lands, or to the state lands BLM would like to acquire through exchange.

In the northern part of the ACEC, interest has been expressed by landowners to exchange private lands to the BLM, which indicates that revision of the ACEC boundary to eliminate those lands is not warranted. Because inclusion of those private lands within the ACEC does not affect private property rights, no impacts to the rights of private landowners would result from keeping the boundary as-is in other portions of the ACEC. Interest expressed in exchange of private lands to the BLM in areas other than the eastern portion of the ACEC make it reasonable not to revise the boundary (and possibly eliminate lands which could be acquired) just for the purpose of excluding private lands from the ACEC.

Reduction of the eastern ACEC boundary should have no impact on grazing operations on the 35-acre public land parcel which would then be outside the ACEC. Those lands would remain available for leasing and livestock grazing.

On the 35 acres of public land that would lie outside the ACEC, few impacts to other wildlife habitat are anticipated. One possible impact that would result is from federal mineral development, but it would be limited to the area of disturbance. Another possible impact to other wildlife habitat would result from increased travel and use of the federal land that might occur should surrounding private land be developed for residential or recreation uses.

No impacts to timber resources or the fire management program as a result of reducing the ACEC boundary are anticipated. Reduction of the eastern ACEC boundary should have no impacts on the visual quality of the federal lands in the area.

OTHER MINERALS

Alternative A

> The BLM would withdraw the existing or acquired federal mineral estate in the ACEC from location and appropriation under the mining laws. Development of existing oil and gas leases would be subject to existing year-round no surface occupancy lease stipulations. Lands not leased for oil and gas would remain unleased. As existing leases expire they would be offered for new leases subject to year-round no surface occupancy restrictions.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, mining claims could not be located or developed on 11,101.42 acres of federal mineral estate that would be withdrawn. Leases containing a year-round restriction on surface occupancy could be developed using directional drilling technology.

Withdrawal of the federal mineral estate would preclude operations under the mining law. That is, mining claims could not be located, and mining for locatable minerals could not occur. The locatable minerals would be committed to nonuse/nonextraction in favor of bald eagle habitat. This would remove the minerals from economic production and leave them unavailable for use by consumers.

Impacts to bald eagle habitat would be possible if mining claims were developed on lands adjacent to the ACEC. The impacts would be similar to those identified for potential limestone quarry sites adjacent to the ACEC (see "Mineral Materials" section).

Under Alternative A, a detailed mineral report would have to be prepared on the lands to be withdrawn. Validity examinations would have to be conducted on mining claims currently located within the ACEC on lands to be withdrawn from mineral location. If the claims are declared null and void, the land they occupy could be withdrawn from mineral entry. On the other hand, it is possible that exploration and development could take place on valid existing mining claims presently located inside the ACEC, subject to the regulations in 43 CFR 3809.

There is a possibility for development of leasable minerals, since BLM made a commitment when the lands were offered for lease. Although this continues to raise legal questions, courts have ruled that BLM makes a commitment to allow development by offering an oil and gas lease on the lands. It is also possible that leasable minerals could be developed on private or state lands and affect resources on public lands. Development, operation, and maintenance of all leases is subject to a year-round no surface occupancy stipulation. This should not adversely impact bald eagle habitat, since facilities would have to be located outside the lease boundaries.

Theoretically, oil and gas leases with no surface occupancy stipulations could be developed utilizing directional drilling technology. This assumes that every point within the ACEC can be reached by directional drilling from somewhere outside the ACEC. This assumption is most likely inaccurate, especially where leases are more than ½ mile from the ACEC boundary. It is conceivable that directional drilling could not be used to reach a desired oil and gas target, due to the size of the lease with the no surface occupancy stipulation, or because of other physical barriers.

This alternative would drastically reduce the probability that any reserves of undiscovered oil and gas subject to no surface occupancy leases in the ACEC could be developed. This is due to the speculative nature of wildcat oil well drilling and the cost associated with it. Very few wildcat exploratory wells are drilled as directional wells due to the extra expense and uncertain nature of the geologic target being sought by drilling. Any requirements such as directional drilling that significantly add to the cost of drilling an exploratory well reduce the probability that the well will be drilled at all. As a result, development of leases subject to a no surface occupancy stipulation could only occur under circumstances where directional drilling is considered geologically and economically feasible. The overall potential for oil and gas in the ACEC is low, and no known or exploration for oil and gas has occurred, so these potential impacts to a lease holder are unlikely to occur.

This alternative would not affect grazing operations in the ACEC area. Timber resources would be affected by development of leasable or locatable minerals only to the extent that development of roads under minerals actions may provide access for commercial sales, access for fire-fighting vehicles, and access for the general public with the associated increased danger of wildfire, and potential for trespass timber harvest.

If valid, existing mining claims or oil and gas leases were developed, the visual quality of the area could be adversely impacted. Varying levels of vegetation and soils removal could be anticipated in association with these types of development as well as increased airborne dust in the area, which could degrade the visual quality and the natural conditions in the environment of the ACEC and surrounding areas. Mining claim or oil and gas lease development would alter the character of the area from relatively natural and undisturbed to more intensively developed and used.

Alternative B

> All federal mineral estate in the ACEC would be available for oil and gas leasing, subject to a no surface occupancy lease stipulation. No federal mineral estate would be withdrawn, and mining claim location would be allowed subject to the mining laws and regulations, and the Endangered Species Act.

Implementation of the portion of Alternative B that would not withdraw lands could not be undertaken unless the RMP was amended. The oil and gas leasing and the locatable minerals parts of this alternative are in conformance with the RMP. This alternative, although not inconsistent with state and local planning, is not in conformance with RMP decisions. Land use decisions and

RMU management prescriptions specific to this alternative that would require amendment include L2, ROD p. 22; SD4, ROD p. 31; and RMP RMU 8, ROD p. 63. Other decisions listed in the "Introduction" section of this HMP may also require amendment.

All existing oil and gas leases contain a year-round restriction on surface occupancy, and could be developed using directional drilling technology. Impacts to bald eagle habitat from development of leases with the no surface occupancy stipulation would be the same as described under Alternative A. Development of minerals on private or state lands could affect resources on public lands. If all leases include a no surface occupancy year-round stipulation, minimal impacts to bald eagle habitat would be expected.

Like Alternative A, this alternative would drastically reduce the probability that any reserves of undiscovered oil and gas subject to no surface occupancy leases in the ACEC could be developed. This is due to the speculative nature of wildcat oil well drilling and the cost associated with it. Very few wildcat exploratory wells are drilled as directional wells due to the extra expense and uncertain nature of the geologic target being sought by drilling. Any requirements such as directional drilling that significantly add to the cost of drilling an exploratory well reduce the probability that the well will be drilled at all. As a result, development of leases subject to a no surface occupancy stipulation could only occur under circumstances where directional drilling is considered geologically and economically feasible. However, with low oil and gas potential and no past exploration, these potential impacts to lessees are unlikely to occur.

Under Alternative B, mining claims could be staked on federal mineral estate and assessment work, and exploration could occur. Normally this activity would occur under a Notice of Intent, and approval of the notice by the authorized officer would not be required. However, because the area is a designated ACEC, the regulations require the operator to submit a Plan of Operations (mine plan) instead of a Notice of Intent for any activity not considered casual use. The regulations do not provide for rejection or denial of a mining plan of operations, but approval may be refused until appropriate mitigation measures are provided for in the plan.

Therefore, any proposed development of locatable minerals within the boundaries of the ACEC would be subject to mitigating measures identified as necessary in a site-specific EA or EIS. Any mining activities would be subject to the mitigation, such as seasonal restrictions on activities, developed in the EA or EIS and incorporated into the proponents mine plan. Operations would be monitored by the BLM to ensure compliance with the mitigating measures in the approved mine plan.

Under Alternative B, development of locatable minerals could impact bald eagles and their habitat. As part of a site-specific EA or EIS for a proposed mining claim, consultation under Section 7 of the Endangered Species Act would be undertaken to attempt to minimize impacts from the proposed development. Not all impacts are necessarily eliminated, and even if the FWS arrived at a "no jeopardy" opinion, some residual impacts to bald eagles could remain from the development.

On mining claims located in the ACEC, any locatable mineral deposit could be extracted and public lands in a claim could be patented to the claimant. Patenting mining claims could result in an isolated parcel of private land surrounded by federal lands. If mining claims were patented under this alternative, the AUMs included in the claim would be removed from the grazing lease. During mineral extraction on the claim, forage on developed areas would be unavailable for grazing.

While there could be impacts to other wildlife habitat, mining claim location actions are required not to cause "unnecessary or undue degradation." This would allow for impacts up to a level considered to be "unnecessary or undue degradation." Impacts from development of leased minerals would be subject to standard and specific stipulations for the ACEC and would occur outside the ACEC boundary, which should result in minimal impacts to other wildlife habitat.

Timber resources would be affected by development of leasable or locatable minerals only to the extent that development of roads under minerals actions may provide access for commercial sales, access for fire-fighting vehicles, and access for the general public with the associated increased danger of wildfire and potential for trespass timber harvesting.

If mining claims or oil and gas leases were developed, the visual quality of the area could be adversely impacted. Varying levels of vegetation and soils removal could be anticipated in association with these types of development as well as increased airborne dust in the area, which would degrade the visual quality and the natural conditions in the environment of the ACEC and surrounding areas. Mining claim or oil and gas lease development would alter the character of the area from relatively natural and undisturbed to more intensively developed and used.

Alternative C

The BLM would withdraw all existing or acquired federal mineral estate in the ACEC from location and appropriation under the mining laws. As oil and gas leases on federal mineral estate in the ACEC expire, they would not be renewed. Lands not currently leased would remain unleased; no new oil and gas leases would be issued.

Alternative C is in conformance with the RMP, and is not inconsistent with state and local planning. Decisions in the RMP make continued oil and gas leasing in the ACEC subject to further review. Land use decision SD4, ROD p. 31, requires that the HMP evaluate whether or not oil and gas leases should be renewed. Other land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative C, mining claims could not be located or developed on 11,101.42 acres of existing federal mineral estate to be withdrawn. Existing oil and gas leases could be developed as noted in Alternative B. As those leases expired, renewal would not be approved, nor would new oil and gas leases be issued.

Under Alternative C, impacts to bald eagle habitat would be similar to those identified under Alternative A until existing oil and gas leases expire, and a withdrawal becomes effective. As Alternative C provides the minimal opportunity for development of minerals on federal lands, it results in the least potential for impacts to bald eagles.

This alternative could preclude extraction of locatable as well as leasable minerals. These minerals would be unavailable for development or use, and would be committed to nonuse in favor of eagles and eagle habitat.

Alternative C would not affect grazing operations in the ACEC area. Until the leases expired, the opportunity for development and subsequent impacts to other wildlife habitat would be the same as that described under Alternative A.

Under Alternative C, existing oil and gas leases could be developed as noted in Alternatives A and B. However, because no new oil and gas leases would be issued as the old ones expire, the area would eventually become entirely unleased and any potential hydrocarbon reserves would not be developed. The consequences of this alternative on locatable minerals would be the same as those in Alternative A.

Timber resources would be affected by development of leasable minerals only to the extent that development of roads under minerals actions may provide access to the ACEC for commercial sales, access for fire-fighting vehicles, and access for the general public with the associated increased potential for wildfire and trespass timber harvest. Potential for damage to timber during mining claim development would be eliminated under this alternative.

If new mining claims or oil and gas leases cannot be developed, the visual quality of the area should not be impacted, and the natural conditions in the environment of the ACEC and surrounding areas would not be degraded. The character of the area would remain relatively natural and undisturbed.

OTHER RESOURCE AREA ROOSTS

The Cole Creek roost is addressed separately for the "Access, Recreation, and Other Land Uses" alternatives because there are decisions in the RMP ROD relating to these types of land uses that are specific to the lands in this roost. Where "All Roosts" are identified, all roosts (excluding the Jackson Canyon ACEC) are considered under the alternatives that follow.

Each alternative for the Cole Creek roost clarifies inconsistencies in the RMP between disposal of riverfront parcels downstream of Casper, access acquisition, and retention for bald eagle management. The significance of the Cole Creek parcel for bald eagles was unknown when the RMP was completed.

ACCESS, RECREATION, AND OTHER LAND USES

Cole Creek Roost

Alternative A

> The public lands in this roost would be retained in federal ownership. Acquisition of access easements would be pursued to provide legal access to the North Platte River for public recreation uses. Other than acquisition of easements, no improvements would be made.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. This alternative would clarify inconsistencies in RMP decisions applicable to the Cole Creek Roost. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, acquisition of access easements could improve management of the roost, and could promote access to recreation resources. Legal public road access to the area and the North Platte River at this roost could be provided, and the public could use the public lands along the river. It would be necessary for BLM to fund easement acquisition. Federal and state agencies would have legal access for administration of the area. No roads would be constructed, but travel on the existing trail would be legal. Public access would improve opportunities for recreational use of the area, particularly fishing and other river-oriented activities. Public access to this parcel could make it available for boat launching and landing and fishing.

Retention in federal ownership of the public lands within the Cole Creek roost would ensure management appropriate to preservation of the bald eagle habitat. Land disposal options would be foreclosed, including disposal to meet recreation or public purpose development needs and opportunities.

Impacts to bald eagle habitat would be similar to other parcels of public lands along the river. However, other parcels are feeding concentration areas, not roost habitat. Providing public access increases the potential for impacts to roosting eagles during winter. Direct impacts to roosting bald eagles could result from public uses. Users could damage the cottonwood roost trees, especially in the summer when fires or unauthorized cutting of the cottonwood trees would be of concern.

Prohibiting recreational developments would limit recreation opportunities on this land. Since the riverfront parcel is small and away from the more heavily used areas upstream of Casper, the lack of facilities may present no particular problem. However, the lack of services such as restrooms may lead to sanitary problems, and the lack of garbage cans may create a litter problem. In both cases, initial planning should address these concerns. Carry In-Carry Out litter signs may be a practical alternative to garbage cans and litter collection. Without facility development, use of the area may be light.

Alternative A could have some affect on grazing operations if the level of public use significantly increases. Landowner-public conflicts could increase. Some grazing use could be eliminated as areas are used for recreational purposes, especially if those areas are closed to grazing.

Impacts to other wildlife habitat should be minimal. No impacts are expected to important or sensitive habitats under this alternative. This alternative should have no impacts to the forestry or minerals programs or resources. A slight increase in potential for wildfires caused by recreation uses would result. No impacts to the visual quality of the area are anticipated.

Alternative B

> The BLM would attempt to acquire private land and access easements along the North Platte River in the vicinity of this roost for public recreation uses. After lands or access easements have been obtained, recreation facilities would be developed, with ORV use limited to designated routes. Construction and all use activities would not be allowed from November 1 through March 31.

Alternative B is in conformance with the RMP, and is not inconsistent with state and local planning. Under this alternative, inconsistencies in RMP decisions would be resolved. Specific decisions and prescriptions are listed in the "Planned Actions" section.

Under Alternative B, in addition to legal access, additional public land and recreation facilities would be available for public use, with ORV use limited to designated routes. It would be necessary for BLM to fund land acquisition, facility construction, and facility operation and maintenance. Further, methods for restricting use from November 1 through March 31 would be needed.

Adverse impacts to bald eagle habitat could result under this alternative.. It is possible that winter use may increase and directly impact eagles using or approaching the roost if the seasonal restriction were not effectively enforced. With improved access roads, it is expected that summer use would increase, and the potential for users to cut or damage trees, or to start fires would also increase.

Retaining the public lands within the Cole Creek roost in federal ownership would ensure management appropriate to preservation of the bald eagle habitat. Land disposal options would be foreclosed, including disposal to meet recreation or public development needs and opportunities. Acquisition of additional lands would increase the land base available for management and preservation in support of eagle habitat.

Developing recreational facilities would enhance public use of the area. Increased use may create conflicts with bald eagle and roosting activity. Acquisition of an access easement would provide legal public access to the area and to the North Platte River. Public access would improve opportunities for recreational use of the area, particularly fishing and other river-oriented activities. Opportunities for canoe landing and launching would be created.

Construction of a road and other facilities would require special construction and reclamation techniques. Soils in the area are very sandy and prone to wind and water erosion. An ORV designation, if enforced, would minimize off-road travel, reduce loss of vegetation, decrease soil erosion problems, and lessen visual resource impacts. An ORV designation can also minimize conflicts with eagle habitat.

Impacts on grazing operations under Alternative B would be similar to, but greater than those identified for Alternative A as a result of developments that would be constructed under Alternative B.

Impacts to other wildlife habitat would include changes in the suitability of local habitat at the developments and in the area around those developments. This alternative should have no impacts to the forestry or minerals programs or resources. Increased recreation uses could result in increased potential for wildfires at the roost greater than would occur under Alternative A.

Development of roads and recreation facilities would change the visual quality of this roost from a mostly natural setting to a setting with visual intrusions. Given the nature of recreation developments, visual quality of the area would not be significantly altered.

Alternative C

> Public lands would be available for disposal to entities that will manage the lands to maintain resource values present. Acquisition of lands and access easements would not be pursued. Neither legal nor improved road access would be provided to the North Platte River in this bald eagle roost.

Implementation of Alternative C is in conformance with the RMP decisions and is not inconsistent with state and local planning. This alternative would clarify inconsistencies in RMP decisions applicable to this alternative. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Action" section.

Under Alternative C, legal public access to the river at this roost would not be provided. Use of these public lands could continue subject to obtaining permission to cross private lands to reach the public lands or accessing them from the river. Federal and state agencies would also need to obtain landowner permission to administer the area, but BLM funding for access and private land acquisition would not be required.

With access and use of the parcel minimized, the possibility of impacts to bald eagles during winter would be reduced. Summer use would also be minimal, and there would be less chance of users starting fires or cutting and damaging roost trees than would result under Alternatives A or B. Bald eagle habitat would likely be preserved without intensive management if there are no developments and little public use.

Disposal of the public lands within the Cole Creek roost to entities that will manage the lands to maintain the resource values would ensure management appropriate to preservation of the bald eagle habitat. Disposal could meet recreation or public development needs and opportunities. If disposal did not occur, options for BLM to expand protection afforded to bald eagle habitat would be limited without the option to acquire more land.

If disposed of, public use of the area could be limited by the acquiring entity if that was found necessary for maintenance of resource values present. Access by way of the river would still be available and may accommodate stopovers for canoes and boats. Boat launching and landing would not be available. If retained in federal ownership, active recreation management of the area would be unnecessary if legal access is not available and facilities are not developed. However, litter control could be a problem depending on the amount of public use the area receives.

This alternative results in minimal impact to other wildlife habitat This alternative should have no impacts to the range, forestry or minerals programs or resources. This alternative results in the least potential for wildfires caused by recreation uses. No impacts to the visual quality of the area are anticipated.

All Roosts

Alternative A

> No new road or other surface development would be permitted on public lands in the bald eagle winter roosting areas. No disturbance to trees, or improvement of roads or legal access would be allowed, except for fire suppression or for bald eagle habitat improvement or maintenance. Habitat improvement or maintenance efforts would not be allowed from November 1 through March 31. Continued use or improvement of existing roads in roosts areas from November 1 through March 31 would be analyzed on a case-by-case basis.
>
> No improvement of roads or legal access would be allowed in parts of the Pine Mountain East and West roosts. These areas are in the W½SE¼, section 19, W½NE¼, section 30, T. 35 N., R. 83 W., and the SE¼SW¼, section 13, E½, E½W½, section 24, NE¼, E½NW¼, section 25, T. 35 N., R. 84 W.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, no surface development or improvement of existing roads or legal access would be permitted. Use of existing developments would be analyzed case by case. Trees would not be disturbed unless necessary for fire suppression or to control mountain pine beetles.

Some impacts to bald eagle habitat could result from casual use in the roosts. Impacts to bald eagle habitat could occur from development of locatable minerals, which could take place without prior review or approval on notice-level claims.

No impacts to land status would occur since there are no plans to acquire or dispose of land under this alternative. However, the private land in the Big Sulfur Springs roost area could be acquired by BLM through the Land and Water Conservation Fund program under the proposed Coffman Ranch acquisition. Other land acquisition opportunities may also arise in the future and could be pursued.

Prohibiting new roads and other new developments may eliminate opportunities for economic development. This may also bar opportunities necessary to keep existing facilities in good operating condition and current with modern technology. Particular difficulty would be realized in the Cole Creek roost area because it is used as a corridor and is near an operating oil field.

Plans for upgrading facilities, such as reconstruction of U.S. Highway 20-26, would be precluded on public land under this alternative. Since only two public land parcels are in the Cole Creek roost, there may be ample opportunity to route new facilities to bypass these parcels of public land. However, existing facilities are in place and routing others around the area would be in conflict with BLM and RMP practices encouraging right-of-way placement in conformance with the corridor concept.

No rights-of-way have been authorized in the Little Deer Creek, Pine Mountain East, Big Sulfur Springs, North Fork Cheyenne River, and Miller Hills roost areas. Railroad right-of-way WYC0294440 is the only right-of-way authorized in the Boxelder Creek roost and that line has been abandoned. This alternative would maintain the status quo in these roost areas. However, it does not adequately recognize that rights have been established under existing oil and gas leases, and facilities may need to be constructed (for example, roads for ingress and egress to develop oil and gas). In the other roost areas, there are rights-of-way and other land uses that have been authorized. Where rights-of-way are existing, prohibiting winter use is in conflict with the terms and conditions of the rights-of-way grants.

County roads in all the roost areas are authorized under Revised Statute 2477 (R.S. 2477). This is a congressional right-of-way grant that is not subject to BLM regulation. Road construction and maintenance within the established right-of-way can proceed without any control by BLM. Prohibiting improvement in legal access would foreclose public use options to those roosts currently lacking legal public access. Prohibiting new roads and other new rights-of-way, and prohibiting improvement of roads and other facilities, may eliminate opportunities for economic development. This may also bar opportunities to make the changes necessary to keep existing facilities in good operating condition and current with modern technology.

In the Stinking Creek roost buffer area, this alternative would preclude upgrading of existing rights-of-way such as Wyoming Highway 487. This highway is currently being reconstructed, and future reconstruction should not be required for many years. The highway also represents a corridor established by use, and is a logical place for location of additional facilities passing through this area. This alternative would preclude routing facilities though this area in corridor fashion. The same type of corridor problems would arise in the Pine Mountain West roost along the Oil Mountain County Road. Facilities exist along the road and it makes a logical corridor route, but the alternative would prohibit new authorizations.

Most of the roost areas are fairly remote from areas of high public use other than hunting, and are somewhat distant from other development areas such as oil and gas fields. Some also have a limited amount of public land surface, and most are in rugged terrain. These factors in combination limit the likelihood of receiving applications to authorize new facilities, and minimize the impact of Alternative A on these type uses.

Grazing activities could be adversely affected by Alternative A because if development of range improvements such as water wells, springs, or fences becomes necessary, they would not be allowed. The seasonal restriction could affect grazing operations if operators are not allowed to use access roads in the roost areas to work livestock or maintain range improvements during the restricted period.

Impacts to other wildlife habitat under this alternative should remain at the current level. Conditions of approval included on proposals that would affect sensitive habitats should mitigate any potential adverse impacts. The exception would be development of locatable minerals, which could take place without prior review or approval on notice-level claims.

Since these other roosts are in rugged areas, and most the forest stands are isolated pockets of timber without any commercial value, this alternative would not affect the forestry program. In most roost areas, the fire management program should not be affected; however, in the Pine Mountain East and West roosts, the restriction against improvement of roads would eliminate firebreak or access construction as an option in wildfire suppression. This could increase the risk of roost habitat loss through higher potential for large fires to result from escapes at initial attack. Impacts to mineral resources are discussed in the following "Minerals" section. No impacts to the visual quality of the area are anticipated.

Alternative B

> On public lands, no improvement of the existing condition of roads or legal access would be allowed. No new facilities, including roads, would be authorized on public lands in any of the roosts.

Implementation of Alternative B could not be undertaken unless the RMP was amended. This alternative, although not inconsistent with state and local planning, is not in conformance with RMP decisions which allow developments in some bald eagle habitat, but restrict development from November 1 through March 31. Recreation roads and facilities are also allowed in some roosts by existing the decisions. Land use decisions and RMU management prescriptions specific to this alternative that would require amendment include L4, ROD p. 23; WL6, ROD p. 30; and R1, ROD p. 24. Other decisions listed in the "Introduction" section of this HMP may also require amendment.

Under Alternative B, improvement of existing roads would not be allowed. Maintenance would be limited to the present condition and could not be performed during the restricted period. New authorizations would not be issued, even for existing facilities.

Alternative B minimizes possible impacts to bald eagles and their habitat by prohibiting future road construction and road improvement in the roost areas.

Prohibiting new roads and other new facilities, and prohibiting improvement of roads and other facilities in the roost areas may eliminate opportunities for economic development. This may also bar opportunities for the changes necessary to keep facilities in good operating condition and current with modern technology. Particular difficulty would be realized in the Cole Creek roost area because it is used as a corridor, and is near an operating oil field. Plans for upgrading facilities such as reconstruction of U.S. Highway 20-26 would be precluded on public land under this alternative.

Since only two public land parcels are in the Cole Creek roost area, there may be ample opportunity to route new facilities to bypass these parcels. However, existing facilities are in place and routing others around the area would be in conflict with RMP decision and BLM practices encouraging right-of-way placement in conformance with the corridor concept.

Impacts in the other roosts would be essentially the same as Alternative A, except that not allowing facility improvement may be in conflict with the terms and conditions of existing authorizations. Prohibiting improvement of existing roads and other facilities could lead to potentially significant impacts to facility users in terms of safety, or if existing facilities no longer met users' needs. Some potential for losses of soils or vegetation exist if improvements to control erosion were not allowed.

The seasonal restrictions under Alternative B would have the same affect on grazing as was described for Alternative A.

Minimal impacts to other wildlife habitat are anticipated; impacts to mineral resources are discussed in the following "Minerals" section. Potential impacts to roost habitat as a result of wildfires, as discussed for Alternative A for the Pine Mountain East and West roosts would apply to all roosts under Alternative B. This alternative would have no effects on the forestry program, nor would visual quality be affected.

FIRE MANAGEMENT

All Roosts

Alternative A

> All federal lands within or adjacent to roosts would be designated full suppression zones. Full suppression includes vehicle use of existing roads and trails, air support, or construction of roads and grading of firebreaks using heavy equipment. To the extent possible, trees would not be cut within 200 yards of the roosts.
>
> Cooperative agreements would be pursued and an initial attack plan established. Prescribed burning would be implemented where necessary, but it would not be allowed from November 1 through March 31.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, wildfire suppression would be initiated in areas designated *priority* full suppression areas before suppression efforts were undertaken in full suppression areas such as the roosts. If there was more than one fire at a time in the resource area, the *priority* full suppression areas would receive BLM's first attention. That is not to say that no suppression efforts would be undertaken at the roosts; through the use of cooperative agreements with other agencies, suppression of all fires would be attempted.

There would be no restrictions on use of existing roads and trails for fire suppression, and use of heavy equipment to construct access or fire breaks could be allowed. An initial attack plan could be established cooperatively with others, and would provide guidelines for use in preparation of an escaped fire situation analysis plan if a fire occurred in the roost areas.

Under Alternative A, there is less priority given to fires in these bald eagle habitat areas than to priority full suppression areas, and there could be damage to the roosts if fires elsewhere took priority over a fire in a roost. With no restrictions on equipment use, heavy equipment or firefighters operating in the roosts could cause damage to or the loss of roost trees. Prescribed fires could get out of control and damage bald eagle habitat in the roosts.

This alternative should not significantly affect existing land status or uses, including grazing operations in roosts. Construction of fire breaks or access routes could increase casual use of roost areas, leading to disturbance of bald eagles during the winter. This impact would be minimized upon successful reclamation of disturbed areas and adequate patrol of closed routes during the reclamation period.

Except for nesting raptors, no impacts to other wildlife are expected since wildfires usually occur during summer or fall which is not a sensitive time to most wildlife. While nesting raptors may be disturbed by fire suppression activities, that impact is not as significant as would be loss of nesting habitat from a fire. Wildlife habitat could be destroyed by wildfire or by firebreak and access construction during suppression efforts. Some habitat would be destroyed by wildfires prior to successful suppression. Prescribed burning for habitat or range improvement would be subject to seasonal restrictions in identified sensitive habitats.

This alternative results in the most potential for damage to timber resources from firebreak and access construction, but such construction affords the highest opportunity for suppressing wildfires. The lack of a priority full suppression designation reduces protection of forest resources from wildfire.

Alternative B

> All federal lands within or adjacent to roosts would be designated priority full suppression zones. Priority full suppression would include vehicle use of existing roads and trails, but not construction of roads or grading of firebreaks. To the extent possible, trees would not be cut within 200 yards of the roosts during fire suppression.
>
> Cooperative agreements would be pursued and an initial attack plan would be established. Prescribed burning would be implemented where necessary, but would not be allowed from November 1 through March 31.

Alternative B is in conformance with the RMP, and is not inconsistent with state and local planning.

Under Alternative A, wildfire suppression would be initiated in the roost areas (as designated priority full suppression areas) before suppression efforts were undertaken in full suppression areas. If there was more than one fire at a time in the resource area, the roosts, as priority full suppression areas, would receive BLM's first attention.

There would be no restrictions on use of existing roads and trails for fire suppression, but use of heavy equipment to construct access or firebreaks would not be allowed. An initial attack plan could be established cooperatively with others, and would provide guidelines for use in preparation of an escaped fire situation analysis plan if a fire occurred in the roost areas.

Under Alternative B, impacts to bald eagle habitat would be reduced from those anticipated under Alternative A. Giving priority to wildfires in bald eagle roosts over other wildfires reduces the chances of wildfires destroying the roosts. Not allowing the construction of roads and firebreaks minimizes the chance of damage to the roosts, and subsequent disturbances resulting from casual use of those routes.

This alternative should not significantly affect existing land status or uses, including grazing operations in roosts.

Impacts to other wildlife habitat would be less than those identified for Alternative A, with less chance of habitat disturbance from new roads or firebreaks, and less chance of subsequent access to the roosts.

This alternative results in the least potential damage to timber resources from firebreak and access construction, but without such construction it affords a lower opportunity for suppressing wildfires. With a priority full suppression designation, protection of forest resources from wildfire would be enhanced.

Limitations on constructing roads and firebreaks would increase the risk of some loss of forest resources from a wildfire. However, with no commercial timber values, this would not adversely impact the forestry program.

MINERALS

All Roosts

Alternative A

> All BLM-administered lands and mineral estate would remain open to oil and gas leasing and development, and development of mineral materials, subject to no surface occupancy or development from November 1 through March 31. This limitation would not apply to maintenance and operation of producing wells, and modifications to this limitation in any year could be approved in writing by the authorized officer. Locatable minerals would be available for location and development subject to compliance with the Endangered Species Act.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, new facilities could not be constructed in support of oil and gas lease development during the restricted period unless a modification were approved. Oil and gas wells could be drilled from April 1 to October 31 each year, and if oil was discovered the well and associated facilities, including roads, could be maintained and produced on a year-round basis. The seasonal restriction could delay drilling operations until the open period, but the potential for developing and extracting the oil and gas mineral resource is nearly the same as if no stipulation existed.

Development of oil and gas leases could result in construction and operations conducted in roosts during summer with damage to roost trees or to roost buffer habitats. Subsequent winter use of access roads, facility operation, routine maintenance, or major repair could be done during the winter roosting period. Development of oil and gas on private or state lands near the roosts could also impact bald eagles or bald eagle habitat on public lands. Any of these possible developments and activities could disturb bald eagles in or approaching the roosts, or cause stress to eagles remaining in the roost. Under this alternative, bald eagles may avoid or eventually abandon the roosts.

Mineral materials could be extracted subject to the seasonal restriction. Generally, this would not result in a great impact to sand and gravel pit operators. This is because much of the demand for road construction is seasonal in rural areas, or is in direct response to the needs of nearby oil fields. Material mined from April 1 through October 31 could be stockpiled off-site for use during the restricted period.

Development of mineral materials during summer could result in roads being constructed into the area near roosts, with subsequent public or trespass use of the roads during winter. If the seasonal restriction was not sufficiently enforced, impacts to bald eagles would be similar to those identified for leasable mineral development. Development of mineral materials on private or state lands could also impact bald eagles as outlined for leasable and locatable minerals.

Mining claims could be staked on private surface-federal minerals lands and assessment work, exploration and development could occur with no notice or review by the BLM.

Mining claims could be staked on federal surface-federal minerals, but the project operator would have to file a Notice of Intent with BLM on projects that would cause a cumulative surface disturbance of 5 acres or less during any calendar year. Approval of the notice is not required by the authorized officer, so RMP decisions prohibiting, constraining or limiting surface development may not apply. The operator, however, is not relieved of the requirements of other federal and state laws for protection of threatened and endangered species and their habitat. Enforcement of those laws would be the responsibility of the state or other federal agencies.

For mining claim operations exceeding 5 acres of cumulative disturbance in one calendar year, a Plan of Operations (mine plan) is required. The operator would have to submit a proposed plan of operations to BLM for review, analysis and approval. Rejection or denial of the mining plan is not an option, but BLM approval may be refused until necessary mitigating measures are incorporated into the plan.

The development of locatable minerals could result in impacts to bald eagles and their habitat. Since work on some mining claims could be initiated without prior review or approval, those projects (including construction of roads in the roosts) could begin during winter and be conducted during evenings or nights in or near the roosts, causing eagles to avoid the roost, leave the roost, or causing stress to eagles remaining in the roost. Long-term activities could cause bald eagles to abandon the roost.

Mineral resource development could result in increased lands uses, such as access roads, processing facilities, and other mineral-related land use developments. Should valuable minerals be discovered, oil fields, mineral material quarries, or mines could result. Associated land uses include pipelines, power lines, and related tanks and facilities.

The consequence of this alternative to the mineral resources would be that the minerals could be extracted and irretrievably lost to any future production. Compensation would be paid to federal and state governments, and local economies would benefit from increased expenditures by mineral companies.

Alternative A does not directly affect grazing operations. However, prohibiting oil and gas or mineral material development from November 1 through March 31 means that these activities must be undertaken during the remainder of the year. This could result in increased activity during April and May and conflict with lambing and calving that could occur during that period.

Impacts to other wildlife habitat from development of leasable and salable mineral resources would be subject to standard stipulations which should result in minimal impacts. Development of some mining claims could be initiated without prior BLM approval, so there could be impacts to sensitive wildlife species during sensitive times of their life cycles, for example, during raptor nesting.

The forestry and fire management programs would be affected by minerals development only to the extent that development of roads constructed for minerals actions may provide access for commercial sales, fire-fighting vehicles, and subsequent access for the general public with increased danger of wildfire. Increased access could enhance wildfire suppression efforts in the roosts.

Alternative B

> All BLM-administered lands and mineral estate would remain open to oil and gas leasing and development subject to no surface occupancy or development within the roost areas at any time. This limitation would apply to maintenance and operation of producing wells, and modifications would not be approved. These restrictions would not apply to existing facilities. Development of mineral materials would be allowed subject to no surface occupancy or development from November 1 through March 31. Locatable minerals would be available for location and development subject to compliance with the Endangered Species Act.

Implementation of Alternative B could not be undertaken unless the RMP was amended. This alternative, although not inconsistent with state and local planning, is not in conformance with all RMP decisions. This alternative is in conformance with mineral material and locatable mineral decisions, but oil and gas leasing decision M1, ROD pp. 9, 10 would require amendment.

Under Alternative B, oil and gas leases would still be issued, but exploration and development would be subject to a year-round no surface occupancy stipulation. No new drilling or production facilities could be constructed, maintained, or operated in support of oil and gas lease development within the roost areas, and no modifications would be approved. Theoretically, oil and gas leases could be developed using directional drilling technology. This assumes that every point within the roost buffer zone can be reached by directional drilling from outside the roost buffer zone. This assumption is probably highly inaccurate, especially where leases are more than ½ mile from the roost buffer zone.

This alternative would drastically reduce the probability that any reserves of undiscovered oil and gas under the roost areas would be developed. This is due to the speculative nature of wildcat oil well drilling and the cost associated with it. Very few wildcat exploratory wells are drilled as directional wells due to the extra expense and uncertain nature of the geologic target being sought. Any requirements, such as directional drilling, that significantly add to the cost of drilling an exploratory well reduces the probability that the well would be drilled at all. As a result, development of leases in the roosts could only occur where directional drilling is geologically and economically feasible.

It is likely that there would be very little impact to the potential oil and gas resource in the roost areas for the reasons outlined above. If the potential resources are never removed, the federal and state governments would never receive any monies from them, and any benefits to the local economy would not occur.

Notwithstanding the no surface occupancy lease restriction, there is a possibility for development of the minerals on lands leased by BLM. Although this continues to raise legal questions, courts have ruled that BLM makes a commitment to allow development by offering an oil and gas lease on the lands. Such development, or development on private or state lands in the roosts, could impact bald eagles or their habitat.

Mineral materials could be extracted subject to the seasonal no surface occupancy restriction. The impacts of such development under this alternative are the same as for Alternative A. Development of mineral materials on private or state lands could also impact bald eagle habitat on public lands.

Under Alternative B, mining claims could be developed; some claims would be subject to the seasonal restriction. Notice-level claims could be developed on federal minerals without prior BLM review or approval. However, if locatable minerals are discovered and activity planned that would disturb more than five acres, a Plan of Operations would be required from the claimant. BLM would review, analyze and approve the Plan of Operations, but the regulations do not provide for rejection or denial of the plan. However, approval may be refused until appropriate mitigating measures, identified in a site-specific EA, are provided for in the plan.

Under Alternative B, development of claims could occur on a seasonal basis. This would probably have no effect on claimants doing annual assessment work, because that type work is primarily seasonal. Development work or actual mining, however, would be seriously impacted by a seasonal restriction. Locatable mineral mining operations are capital-intensive and market-driven operations. The operations are almost always year-round and cannot afford to start up and shut down on a seasonal basis. It is unlikely that a mining company faced with the seasonal restriction would make the expenditure necessary to open and operate a mine for only seven months of the year. As a result, any locatable mineral resource within the roost buffer zones would likely never be developed under this alternative.

Mineral resources developments under this alternative could result in increased lands uses, such as access roads, processing facilities, and other mineral-related land use developments. Should valuable minerals be discovered, oil field facilities outside the roosts, or mineral material quarries, or mines in the roost areas could result. Associated land uses include pipelines, power lines, and related tanks and facilities.

Alternative B should not directly impact livestock grazing operations in the roosts. Impacts to other wildlife habitat from development of leasable and salable minerals would be subject to standard stipulations which should result in minimal impacts. Development of some locatable minerals mining claims could be initiated without prior BLM approval, so there could be impacts to sensitive wildlife species during sensitive times of their life cycles, such as during raptor nesting.

The forestry and fire management programs would be affected by minerals development only to the extent that development of roads constructed for minerals actions may provide access for commercial sales, fire-fighting vehicles, and subsequent access for the general public with increased danger of wildfire. Increased access could enhance wildfire suppression efforts in the roosts.

Alternative C

> All BLM-administered lands and mineral estate in bald eagle roost areas would be withdrawn from location and appropriation under the mining laws. As oil and gas leases currently in effect on federal mineral estate expire, the leases would not be renewed. Lands not currently leased for oil and gas would remain unleased, and no new oil and gas leases would be issued. Mineral materials would not be available for disposal.

Implementation of Alternative C could not be undertaken unless the RMP was amended. This alternative, although not inconsistent with state and local planning, is not in conformance with RMP decisions. Land use decisions and RMU management prescriptions specific to this alternative that would require amendment include M1, ROD pp. 9, 10; M3, ROD p. 11; M4, ROD p. 11; and, WL6, ROD p. 30. Other decisions listed in the "Introduction" section of this HMP may also require amendment.

Under Alternative C, it is unlikely than any of the federal mineral estate would be developed. The federal mineral estate within the roost buffer zone would be withdrawn from location and appropriation under the mining laws. Mining claims could not be staked or developed. Oil and gas leases could be drilled as in Alternative A, but as those leases expired, new ones would not be issued. Therefore, if a lease is not drilled in its primary term or held by production, the opportunity for ever developing the potential oil and gas reserves would be lost. Mineral materials could not be extracted under this alternative.

The net effect of this alternative is that the minerals would probably never be developed and would not be impacted. The federal and state governments would not receive any compensation for the minerals, nor would the local economy receive any of the economic benefit that could result from mineral development in these areas.

Under Alternative C, short-term impacts to bald eagle habitat from development of federal minerals would be similar to Alternatives A and B. There would be opportunity for initiation of development until the leases expired or a withdrawal became effective. After leases expire and the withdrawal is in place, there would be no impacts to bald eagle habitat. There would be no development of salable minerals except on private or state lands. This alternative provides the minimal opportunity for development of minerals on federal lands, and the least possibility of impacts to bald eagles.

No land use developments associated with mineral development would occur under this alternative. The federal lands would remain in whatever state of use is present when leases expire and the withdrawal becomes effective. Essentially, this alternative dedicates the federal lands to nonuse and nonextraction in favor of protection of bald eagle habitat and use by bald eagles.

Alternative C should not directly impact livestock grazing operations in the roosts. Until the leases expired and a withdrawal was effective, the opportunity for development and subsequent impacts would be the same as that described under Alternative A but could occur only in the short term.

The forestry and fire management programs would be affected under this alternative only to the extent that developments prior to lease expiration or the withdrawal becoming effective may provide access for commercial sales, fire-fighting vehicles, and subsequent access for the general public with increased danger of wildfire. Increased access could enhance wildfire suppression efforts in the roosts.

NESTS

Alternative A

> Surface development would be prohibited on public lands within ¼ mile of the North Platte River, which includes the nests, on a year-round basis. In addition, surface development within ½ mile of the Careyhurst nest would not be allowed from February 1 through August 15. This limitation would not apply to the Rawhide nest.
>
> At the Rawhide nest, and for actions within ½ to 1 mile of the Careyhurst nest, or for newly discovered nests, the size of the buffer zone would be determined case-by-case, in consultation with the FWS and the WGFD.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, actions proposed within ½ mile of the Careyhurst nest, or within ¼ mile of the Rawhide nest, would be analyzed as received. A buffer zone around the nests would not be determined until an action requiring BLM approval was considered. For each proposal, a buffer zone determination would be made in consultation with the FWS and WGFD.

Impacts to bald eagles or the nesting habitat could result from many different activities. Development of locatable minerals, which could be undertaken without prior notice or approval, could take place during the nesting season within the ¼-mile no surface occupancy, or the ½-mile seasonal restriction area. Outside the ¼-mile zone, leasable minerals could be developed during the unrestricted period, with maintenance and operation of facilities occurring during the nesting period. Casual recreation requires no authorization, and could occur within the ¼-mile zone at any time. Similar activities could occur at any time on state or private lands near the nests.

Impacts to bald eagles that could result from human activities during the roosting period (November 1 through March 31), or nesting period (February 1 through August 15) would be considered on a case-by-case basis. During the courtship or egg-laying periods, activities could cause the bald eagle pair to abandon the area. The pair may attempt to nest elsewhere, but a new area could be less suitable for successfully raising a brood. Activities occurring during the incubation stage could cause the pair to stay off the nest long enough for the eggs to fail. Successful re-nesting upon this event would be very unlikely. Activities occurring after hatching could cause the adults to stay off the nest long enough for the young to freeze or starve. It is unlikely there would be time for successful re-nesting after this event.

No impacts to land status would occur under this alternative. The no surface occupancy restriction should have no impacts on public land uses at the Careyhurst nest, as no public lands are present there. Virtually all of the public land at the Rawhide nest is within the ¼-mile no surface occupancy restriction. Other than for recreation, no developments are anticipated in this area. This decision would preclude any development of recreation facilities, and limit recreation opportunities on the lands near the Rawhide nest.

In addition to bald eagle nesting habitat, another type of sensitive habitat along the river is raptor nesting areas. The ¼-mile no surface occupancy year-round restriction effectively minimizes impacts from federal actions on this habitat. Grazing and casual recreation uses damage riparian vegetation used as other wildlife habitat, and may be major factors in loss of the cottonwoods along much of the river. If recreation uses increased, the potential for damage to riparian vegetation would also increase.

If surface development restrictions are applied to range improvement projects, grazing operations and livestock management in the areas around the nests could be affected by this alternative.

No change from the existing management would result under this alternative, so there should be no impacts to the forestry, fire management, or minerals programs as a result.

Alternative B

On public lands, surface development would be prohibited within 1 mile of known or discovered active nests on a year-round basis. The known nests' buffer zones encompass approximately 3,240 acres at each nest. Unless the buffer zones were proposed for revision, additional consultation with the FWS and WGFD would not be required.

Alternative B is in conformance with the RMP, and is not inconsistent with state and local planning. By HMP development, RMP decision WL7 is implemented.

There should be no impacts to nesting bald eagles from actions authorized by BLM as the 1-mile buffer should be adequate to avoid conflicts. With the predominance of private surface and minerals at bald eagle nests, there is potential for impacts from private development.

Casual uses, such as fishing and boating have the potential to disturb eagles and cause them to fly away from the nests. The present low levels of casual use at known bald eagle nest sites is not considered to be a problem to nesting bald eagles. However, development of facilities to increase recreation use during February through August near bald eagle nests could result in disturbance to the nesting eagles. In particular, fishing from the banks, an activity where people stay relatively close to the nest, is most disturbing. When fishing from boats on the river people move through and out of the nesting zone, which is much less disturbing to the eagles.

No impacts to land status would occur under this alternative. The no surface occupancy restriction should have no impacts on public land uses at the Careyhurst nest, as no public lands are present there. Virtually all of the public land surface at the Rawhide nest is within the ¼-mile no surface occupancy restriction, and other than recreation, no developments are anticipated in the area. This decision would preclude any development of recreation facilities, and limit recreation opportunities on the lands near the Rawhide nest.

If restrictions on surface development are applied to range improvement projects, grazing operations and livestock management in the areas around the nests could be affected by this alternative. There should be no impacts to the forestry or fire management programs.

Impacts to other wildlife in important habitat areas such as raptor nesting areas would be similar to those identified for Alternative A, but with less likelihood for actions in important habitat areas.

FEEDING HABITAT AREAS

NORTH PLATTE RIVER

Alternative A

The BLM would pursue acquisition of riverfront land along the North Platte River upstream of Casper. Excluding the Cole Creek roost, BLM would dispose of BLM-administered lands along the North Platte River downstream of Casper to entities that will manage the lands to maintain resource values present.

Surface development, except for habitat or recreation improvements, would be prohibited within ¼ mile of the North Platte River on a year-round basis. Mineral material or other surface development on specific parcels of public land (map 19) within ½ mile of the river would not be allowed from November 1 through March 31. This limitation would not apply to maintenance and operation of existing or producing mineral facilities, and modifications to the seasonal limitation in any year may be approved by the authorized officer.

Bald eagle feeding habitat along the river upstream of Casper would be improved by planting cottonwood trees or placing structures along the river for use by bald eagles during feeding activity.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Land use decisions and RMU management prescriptions specific to this alternative are listed in the "Planned Actions" section outlining the alternative in more detail, and in the "Introduction" section.

Under Alternative A, riverfront lands with high wildlife habitat or recreational values upstream of Casper could be acquired and made available for public use. Riverfront lands downstream of Casper, with the exception of the Cole Creek roost, could be disposed of only to public entities or non-profit organizations, and could be used by those parties for protection of the river resource values. Disposal of these lands could include lease or patent conditions for bald eagle habitat protection. BLM could improve bald eagle habitat on the river upstream of Casper.

Acquisition of riverfront lands upstream of Casper would provide an additional federal land base for management and enhancement of recreation and wildlife resources along the river. Opportunities for constructing additional recreation facilities and enhancing recreational opportunities on and near the river would also be increased. Wildlife habitat could be enhanced by management aimed at developing and preserving shorelines and riparian vegetation, and improving bald eagle and other raptor habitat.

Disposal of riverfront lands downstream of Casper would remove them from the public land base. These are fairly small parcels, not easily managed by BLM. Disposal would reduce federal land management costs. Because of the limitation that such lands be disposed of only to agencies that would ensure continued public use, no loss in access would be realized. Transferring these land parcels to another entity could result in facility and access developments that are not presently planned under BLM management, thus enhancing recreational opportunities. Wildlife resources should be preserved, but some conflicts between recreation and wildlife are likely.

Upon disposal from federal ownership, these lands could be available for a variety of actions, such as livestock operations, recreational, and other land uses (roads, pipelines, and power line developments). If there is mineral potential on the land, minerals are generally reserved to the U.S., and mineral development would be subject to BLM approval. On other land uses, the private or state entity acquiring the lands would not necessarily have responsibility "to further the purposes of the (Endangered Species) Act" as does the BLM. Thus, there is potential for actions to occur during winter on these lands which could impact bald eagles or their habitat. Adverse impacts could occur if human activities (for example, waterfowl hunting or fishing) were close enough to feeding eagles to cause the eagles to leave the location, or to experience some stress if they stayed near the disturbing action. The impacts if this occurred include loss of feeding opportunities or a secure night roost, elevated heart rate and other stress factors, and a loss of energy levels.

Under Alternative A, no new development would be allowed within ¼ mile of the river, and within ½ mile no surface development during the restricted period could be allowed (except to enhance recreation or wildlife values). Use of existing facilities would not be limited from November 1 through March 31, and the limitation on development within ½ mile could be modified by BLM.

The ¼-mile area of no surface occupancy year-round, and the ½-mile seasonal restrictions, essentially prevent possible impacts to feeding bald eagles from federal actions within the feeding concentration areas. However, actions on private and state lands within the restricted areas could still take place and impact bald eagles or their feeding habitat.

In addition to bald eagle habitat, another type of sensitive habitat along the river is raptor nesting areas. The ¼-mile no surface occupancy year-round restriction would effectively minimize impacts from federal actions on this habitat. Grazing and casual recreation uses damage riparian vegetation used as other wildlife habitat, and may be the major factors causing loss of the cottonwoods along much of the river. If recreation uses increased, the potential for damage to riparian vegetation would also increase.

With distance and seasonal restrictions on federal mineral development, it is unlikely that new sources of mineral materials would be developed on public land within ¼ mile of the river. This alternative could preclude opportunities to improve wildlife habitat by using mineral material pits as special wildlife enhancement project. Waterfowl commonly use pits for resting and feeding activities, which provides additional feeding opportunities for bald eagles and other raptors in the area. As an example, the WGFD will dredge out two old (unreclaimed) gravel pits on the east end of Edness Kimball Wilkins State Park. The specific purpose is to use the pits as a waterfowl habitat enhancement project and educational area.

Planting cottonwood trees or constructing structures would provide perches for bald eagles to use during waterfowl hunting and river fishing. This could increase bald eagles' prey-catching efficiency.

Alternative A could have some affect on grazing operations if parcels of land are acquired along the North Platte River and the level of public use significantly increases. Landowner-public conflicts could increase if this happens. Downstream of Casper, lands could become unavailable for grazing use if they are disposed of under the R&PP Act; two-year prior notice would be given if lands were considered for R&PP patent.

Grazing operations could also be affected if restrictions on surface development along the river are applied to range improvement projects. If a cottonwood tree planting program is implemented along the river the trees would need to be protected from livestock. This could involve fencing areas to exclude livestock. However, unless large areas are fenced to protect trees from livestock grazing, the affect on grazing operations should not be significant.

Under this alternative, the only potential impacts to the fire management and forestry programs would result from the increased chance of fires caused by recreation users.

Alternative B

> The BLM would pursue acquisition of riverfront land along the North Platte River upstream of Casper. Excluding the Cole Creek roost, BLM would dispose of BLM-administered lands along the North Platte River downstream of Casper to entities that will manage the lands to maintain resource values present.
>
> Mineral material or other surface development would be allowed within ¼ mile of the North Platte River, subject to no surface occupancy from November 1 through March 31, on approximately 240 acres of federal mineral estate in the NE¼, and the W½SE¼, section 11, T. 31 N., R. 82 W. Mineral material or surface development on other public lands would be subject to the restrictions outlined in Alternative A. Land acquisition and disposal actions, and bald eagle feeding habitat improvement, outlined in Alternative A are part of this alternative.

Mineral material development on 240 acres as outlined in Alternative B could be allowed without amendment of the RMP. This alternative clarifies specific land use decisions and RMU management prescriptions M3, ROD p. 11; SWA2, ROD p. 27; and RMU7, ROD p. 54. The other parts of this alternative are in conformance with the RMP, and this alternative is not inconsistent with state and local planning.

Under Alternative B, the identified lands would be available for continued federal mineral materials development and extraction. The existing material sale could be reissued and the materials removed. If seasonal operations were permitted on portions of the 240 acres not currently under permit, impacts to bald eagles would remain at the present level. The gravel pits located adjacent to the river on private lands could continue operating year-round and impacts to bald eagles or their habitat could result.

Without a year-round no surface occupancy restriction on the portion of the 240 acres not presently under mineral material permit, mineral development could be allowed near the river. In sensitive wildlife habitat, such as known raptor nests, standard stipulations could be attached to permits to avoid impacts from the mineral developments.

Two wildlife habitat concerns are fisheries habitat and the riparian resources. Most of the 240-acre parcel has very little vegetation. During high river flows some soil materials from pits or roads could erode into the river. Existing mineral material sites on private lands in the area have been flooded in the past. Siltation or other impacts resulting from the private pits cannot be reduced by BLM through this alternative. However, any new material operation authorized by BLM could incorporate mitigation designed to avoid erosion and siltation into the river.

If mining were allowed where vegetation is well established in riparian zones along the river, it could damage the vegetation. Riparian zones make up only about one percent of all wildlife habitat in the resource area and provide for a greater abundance of wildlife than other habitats. Actions that impact riparian vegetation habitat could have a more adverse effect on wildlife habitat than actions in non-riparian vegetation. When sand and gravel operations are located in riparian vegetation along the river, impacts could be long-lasting if pits are kept open for a long period to provide materials upon demand. However, once the mineral materials have been extracted, reclamation of the areas should be adequate to restore riparian habitat.

Lands disturbed by extraction operations could be reclaimed upon depletion of the sand and gravel. BLM could improve bald eagle and other raptor habitat by requiring permit holders to reclaim the pits so that they provide additional wetlands. This would provide additional waterfowl habitat as well. More waterfowl using the reclaimed pits would provide an additional food source for bald and golden eagles and other raptors. If permit holders defaulted on reclamation obligations, the mandatory bond could be used to perform the work.

Under Alternative B, if the mineral materials were extracted from the 240 acres, the mineral would be irretrievably lost to any future production. Compensation would be paid to federal and state governments, and local economies would benefit from increased expenditures by mineral companies.

Impacts to land status, uses, access, and land use capability from all actions outlined under this alternative would be the same as those outlined for Alternative A. The impacts of this alternative to grazing operations are the same as for Alternative A.

Under this alternative, the potential impacts to all other resources and programs are the same as Alternative A. Benefits to bald eagles from habitat improvement are also the same.

RANGELANDS

Alternative A

> No seasonal or occupancy restrictions would be applied to public rangelands feeding areas.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Under Alternative A, land and resource uses would not be subject to any bald eagle habitat seasonal or occupancy restrictions, but would be subject to all applicable RMP decisions.

Several kinds of actions, such as livestock operations, mineral development, realty actions (road, pipeline, and power line development), and recreational activities, occur regularly during winter in the rangeland feeding areas used by bald and golden eagles. However, the estimated 200 to 250 bald eagles are widely and irregularly scattered throughout the approximately 5,000,000 acres of rangelands in Natrona and Converse counties. There are times when these actions occur in bald eagle feeding habitat close enough to the eagles to cause the eagles to leave the location (for example, when feeding on carrion) or to experience some stress if they stay near the disturbing action. Impacts to bald eagles when this occurs are loss of feeding opportunities, elevated heart rate and other stress factors, and a loss of energy levels. This conflict between disturbing actions and eagles in close proximity is very infrequent, such that the level of impact to individual eagles and to the wintering population is very low.

Under this alternative, land status, access actions, and land and mineral resource uses could continue as they do now. The impact Alternative A would have on grazing resources would not be significant unless special stipulations or restrictions are applied and then only certain conditions would affect grazing operations.

Applying RMP decisions to proposals would result in few impacts to other wildlife habitat. Stipulations to restrict disturbing activities during crucial times for wildlife (nesting, rearing of young, or wintering in a concentration area), would be applied to proposals. Some conflicts could occur if disturbance activities are authorized in close proximity to unknown sensitive habitats. Exceptions to seasonal wildlife stipulations could be allowed if winter conditions are judged to be mild. Subsequently, winter conditions could worsen and a conflict between the authorized action and the sensitive wildlife resource could result.

Alternative B

> A public education program would be developed by BLM for bald eagle feeding areas along the North Platte River and on public rangelands. Information would be distributed to landowners, grazing lessees, and the public. Information would be designed to identify ways land users could avoid hazards to bald eagles and benefit bald eagles using the feeding areas.

Alternative B is in conformance with the RMP, and is not inconsistent with state and local planning.

Under Alternative B, information would be designed and distributed by BLM. This alternative would provide methods to avoid some of the incidents of conflict between winter activities and bald eagles feeding in the rangelands habitat. The impacts to bald eagle habitat would be similar to Alternative A, but at a lower level.

Under this alternative, land status, access actions, and land and mineral resource uses could continue as they do now. Alternative B would not have any great impact on grazing resources. It could have the beneficial effect of educating landowners, grazing lessees, and the public about bald eagles, and possibly enhance the working relationship between these groups and the BLM. Impacts to other wildlife habitat would be essentially the same as under Alternative A.

FLYWAYS

Alternative A

> Actions proposed on public lands in known or discovered bald eagle flyways would be analyzed on a case-by-case basis. Consultation with the FWS in accordance with the Endangered Species Act would be initiated if required. No surface development would be permitted on federal lands in the Emigrant Gap Flyway, which are closely associated with the Jackson Canyon ACEC roosts.

Alternative A is in conformance with the RMP, and is not inconsistent with state and local planning. Under Alternative A, BLM would assess proposed actions as received and determine if there is a need for consultation. Any development restrictions, except in roosts along the flyways, would be determined as part of BLM's assessment.

Under this alternative, development of mineral resources, other land uses, and casual recreation could take place. Some uses, such as casual recreation and projects to develop locatable minerals, could be initiated without prior notification or approval and could take place at any time, including winter. The development of leasable minerals (oil and gas) would be constrained by standard and site-specific stipulations, but development during summer allows maintenance and operation of facilities during winter. Approved rights-of-way would allow maintenance and operation for the long-term, including during winter. Most mineral materials, forestry, grazing, wildlife, and cultural resource actions would be limited to summer activities in the flyway habitat. Development of roads and trails would be a result of many of these activities, with additional casual use occurring on the new roads and trails.

Existing bald eagle flyways include portions of grazing leases, state highways 220 and 487, housing developments, and mined areas. From observed eagle behavior, eagles seem to tolerate developed areas and activities while using the flyway habitat. A noteworthy potential impact to eagles using flyway habitat is major power lines or similar structures. These are difficult for eagles to see in poor light conditions, such as late evening, early morning and during fog or snow. Under these conditions, eagles may collide with power lines and suffer serious injury or be killed.

Three designated right-of-way corridors traverse the Emigrant Gap Ridge and Oil Mountain flyways, and additional power line and other right-of-way facilities can be expected in the future. Under this alternative, there is potential for resource conflicts on projects in or near flyways. Prohibiting construction in roosts should cause only minor conflicts, most of which can be accommodated by routing around roosts. However, avoidance of the flyway habitat for linear facilities could prove impractical or impossible.

Crucial habitats (nests, leks, big game winter ranges) of other wildlife should not be impacted if the seasonal stipulations are applied as conditions of approval of proposed actions. However, it is possible that other wildlife crucial habitats in the flyways have not been identified.

This alternative should not have a significant affect on grazing operations. No change from the existing management would result under this alternative, so there should be no impacts to the forestry, fire management, or minerals programs as a result.

Alternative B

To be authorized on public lands, new power distribution/transmission lines would have to be designed to reduce hazards to raptors from collisions with the proposed facilities. Other proposed actions would be subject to analysis and development restrictions as outlined in Alternative A.

Alternative B is in conformance with the RMP, and is not inconsistent with state and local planning.

Under Alternative B, proposed overhead power lines in flyways would have to be designed to reduce hazards to raptors before approval by BLM.

This alternative should result in less impacts to bald eagles than Alternative A since under Alternative B power lines in the flyways would be designed to minimize hazards. There would be some hazard to bald eagles remaining since a power line, even with maximum design features, still provides more opportunity for impacts than not having a power line at all.

Alternative B would cause some increase in cost for design and construction on power line projects crossing flyways. This added cost should be relatively low on major transmission line projects. There should be no additional costs on small power distribution lines, as these pose very little threat of raptor collisions.

Other actions with similar impacts, as described under Alternative A, could occur under this alternative. The impacts would be the same as identified for Alternative A. This alternative should not have a significant affect on grazing operations. Impacts to other wildlife habitat should be similar to those identified under Alternative A. No change from the existing management would result under this alternative, so there should be no impacts to the forestry, fire management, or minerals programs as a result.

Alternative C

> Mineral material development activity on public lands in known or other discovered bald eagle flyways would not be permitted from November 1 through March 31. To be authorized, new power distribution/transmission lines would have to be designed to reduce hazards to raptors from collisions with the proposed facilities.

Implementation of mineral material development restrictions outlined under Alternative C could not be undertaken unless the RMP was amended. Land use decision M3, ROD p.11 would require amendment. Other decisions listed in the "Introduction" section of this HMP may also require amendment. The portion of this alternative regarding power lines is in conformance with the RMP. Some of this alternative may be inconsistent with state and local planning.

Under Alternative C, any mineral material activity subject to BLM approval would not be permitted to operate during the restricted period. Proposed overhead power lines requiring approval by BLM would have to be designed to reduce hazards to raptors.

New mineral material development would not be allowed during the restricted period. This condition is not currently applied to proposals located outside roost or nest areas, and could impact the economics of proposals. Existing projects do not contain the seasonal restriction, and without the concurrence of permit holders, it could not be applied to those authorizations.

To date, BLM has not identified that mineral material development (or other development) conflicts with bald eagle use of flyways. As discussed in the "Affected Environment" section, bald eagles in the Casper area fly over highways, housing developments, ranches, and some mineral development, much of which has occurred in the flyways for several decades. If there is some level of stress or other impact to bald eagles from mineral material development in flyways, the anticipated level of impacts to bald eagles is negligible under this alternative. Impacts to bald eagles from construction and maintenance of power lines would be the same as described for Alternative B.

This alternative should not have any impacts on non-mineral related land uses, including grazing and recreation, and the forestry and fire management programs. The impacts to proposed transmission lines would be the same as those described for Alternative B.

Other sensitive wildlife habitat used for raptor nesting, sage grouse breeding and nesting, or big game wintering in a crucial area, might benefit from restrictions on mineral materials development during winter. However, any potential conflict between wildlife use and development is addressed case-by-case, using standard stipulations. This alternative would restrict development even where no conflict between wildlife habitat and development exists.

CUMULATIVE IMPACTS

This section summarizes the cumulative impacts from past, present and reasonably foreseeable future actions in bald eagle habitat areas that could result from the combination of habitat area alternatives identified in the "Preferred Alternative" portion of the "Planned Actions" section.

The Preferred Alternative is a combination of planned actions identified for the Jackson Canyon ACEC, other roosts, the nests, and the feeding habitat areas and flyways. Because of the numerous potential combinations of planned actions possible, a cumulative impacts assessment that considered what could happen under all possible combinations of alternatives was not performed. Only the combination of actions outlined in the Preferred Alternative is analyzed in this section. However, in the "Environmental Consequences" section, cumulative impacts were identified in the analysis for each alternative. The following discussion summarizes the major cumulative impacts that would result from this alternative, but it does not repeat cumulative impacts identified previously in this section.

The following table condenses the actions outlined in more detail in the preferred alternative.

Recreation, Access, and Other Land Uses in All Habitat Areas

Implementation of preferred recreation alternatives in all bald eagle habitat areas should result in an increase in the degree of BLM management and execution of existing RMP decisions. No additional restrictions on the use of public lands in the habitat areas would be applied, and authorized and casual uses now occurring are anticipated to continue without interruption.

However, with increased attention to administration for bald eagle protection, especially in the Jackson Canyon ACEC, unauthorized use of ORVs during the restricted winter period and the potential disturbance to bald eagles in

TABLE 7
RMP PREFERRED ALTERNATIVE

JACKSON CANYON ACEC	COLE CREEK ROOST	ALL ROOSTS	NESTS	FEEDING HABITAT	FLYWAYS
Recreation & Access - ORV use limited to 3,890 acres public land. - No ORV use on public lands allowed 11/01 thru 03/31. - No new roads or other facilities on public lands in or leading to ACEC. - Exception: could authorize 60-foot wide, year-round use road to archery range.	**Access, Recreation & Other Land Uses *** - Available for disposal from BLM to entities able to manage resource values. - No public easements pursued.	**Access,Recreation & Other Land Uses** - No new surface development. - Existing uses from 11/01 thru 03/31 analyzed case by case.	**All Nests, Known or Discovered** - No surface development ¼ to 1 mile of nests; specific distance determined case-by-case; consultation with FWS per Endangered Species Act if required.	**North Platte River *** - BLM attempt to acquire river frontage upstream of Casper; dispose of land downstream. - No surface development year-round ¼ mile of river except for recreation & habitat improvements. - Mineral material not allowed ½ mile of river from 11/01 thru 03/31 (can be modified). - Mineral material allowed ¼ mile of river on specific 240 acres; not from 11/01 thru 03/31. - BLM improve bald eagle habitat: plant trees/place structures for use during feeding activities.	**All Flyways, Known or Discovered *** - Analyze proposals on case-by-case basis; consultation with FWS per Endangered Species Act if required. - On approx. 2,640 acres, distribution & transmission lines must be designed to reduce hazards to raptors.
Exchange - BLM acquire all state lands in ACEC for public lands outside ACEC; no seasonal surface occupancy restriction but access and blasting limitations on exchanged lands.					
Forestry ** - Remove acreage & volume from commercial base. - Timber harvest for stand or habitat improvement only; not allowed 11/01 thru 03/31.				**Rangelands** - Site specific seasonal or occupancy restrictions only. - BLM develop education program & distribute.	
Fire Management - Designate priority full suppression. - Coop agreements.	**Fire Management** - Designate priority full suppression. - Coop agreements.	**Fire Management** - Designate priority full suppression. - Coop agreements.			
Mineral Materials - None selected.	**Mineral Materials *** - No disposal allowed.	**Mineral Materials *** - No disposal allowed.			
Boundary Adjustment ** - Enlarge ¼ mile to south. - Reduce eastern line to township line.					
Other Minerals - Withdraw minerals from mining law location. - All lands leased for oil & gas; leases subject to no surface occupancy.	**Other Minerals *** - Withdraw minerals from mining law location. - All lands leased for oil & gas; leases subject to no surface occupancy.	**Other Minerals *** - Withdraw minerals from mining law location. - All lands leased for oil & gas; leases subject to no surface occupancy.			

* Clarifies existing RMP decisions. ** Amendment of RMP decisions required.

roosts should be decreased. A reduction of the potential for disturbance to bald eagles in the roosts as a result of recreation activities should be realized through application of the following mitigating measures (outlined in more detail in the alternative and "Environmental Consequences" sections):

- formally designating ORV routes through appropriate publication;
- installing informational signs;
- barricading or obstructing winter ORV access; and,
- enforcing ORV designation through patrols and penalties.

As a result of implementation of preferred access alternatives, little change from current BLM management would result. Outside the ACEC, legal access over public land would be made available to Natrona County to the archery range, and this BLM road authorization would not negatively impact negotiations between the county and private landowners in the area. Selection of other archery range road alternatives, although providing legal access to the archery range, could have the effect of impeding private landowners from full use and enjoyment of their properties. In addition, analysis of the archery range road alternatives identified conflicts between private land users along the road. These conflicts are properly negotiated between the aggrieved parties, and are not within the jurisdiction of BLM to solve.

No changes to current management results from not allowing additional roads or facilities in the ACEC, but it does allow continued protection of bald eagles in the roosts. Considering the terrain of the ACEC, the present and possible ACEC land status (if exchanges are completed), and what future developments of privately owned lands in and near the ACEC are likely to be undertaken, this alternative presents minimal impacts to public land users or private landowners in the area.

The preferred access alternative limiting new roads and other surface developments in other roosts clarifies existing RMP decisions, but it should not increase restrictions from those currently in place on public lands in roosts. It is standard operating procedure to coordinate with parties proposing to construct roads or other facilities on public lands to ensure that conformance with RMP decisions is achieved, and this practice would be continued by implementation of this alternative. Where non-recreation access or other developments exist, a case by case analysis for continued use from November 1 through March 31 would be undertaken to ensure compliance with the Endangered Species Act.

At the Cole Creek Roost, the preferred recreation and access alternative should serve to resolve conflicts between RMP decisions made before the roost was discovered. Under the preferred alternative, acquisition of public easements over private land would not be pursued, and the roost lands would be available for disposal to entities that could manage the lands to preserve the resource values. The existing level of recreation uses could continue, but additional recreation would not be encouraged by BLM's road or facility development. Protection of bald eagles and roost habitat could be ensured by the acquiring entity through bald eagle protective conditions if BLM disposed of the lands. As the public lands in this roost are isolated and, without access, difficult to manage, the preferred alternative would increase opportunities for active management of the bald eagle habitat. As a result, the potential for impacts to bald eagles in the roost should not increase over the present level, and future enhancement of roost habitat could be undertaken.

Existing and potential recreation and access uses in nest and flyway habitat areas should be unchanged from the present level. Recreation opportunities currently available in feeding habitat areas along the North Platte River should not decrease under the preferred alternative. By pursuing acquisition of land along the North Platte River upstream of Casper, BLM could increase and improve public recreation opportunities in the area. Management of existing public lands combined with acquired lands would be enhanced. Additional public lands along the river could result in improvement of bald eagle feeding habitat. Year-round surface occupancy and development restrictions would not apply to recreation improvements, and improvement of bald eagle habitat through tree planting or placing structures could enhance the scenic quality in areas used by recreationists, as well as benefit bald eagles.

In summary, no increase from existing limitations on recreation and access should result from the preferred alternative, potential limitations to or interference with private landowner rights should be avoided, and protection and enhancement of bald eagle habitat to meet BLM management objectives should be realized.

Exchange, Mineral Material, and Boundary Adjustment in the Jackson Canyon ACEC

The exchange, mineral material, and boundary adjustment preferred alternatives apply only to the Jackson Canyon ACEC.

Implementation of preferred exchange and boundary adjustment alternatives in the Jackson Canyon ACEC bald eagle habitat areas should improve BLM's ability for efficient, consistent management of public lands in the ACEC. Consolidation of state lands in and adjacent to the ACEC with existing public lands would eliminate the intermingled state-federal land pattern now present. With a more consolidated public land base in the ACEC, BLM could emphasize bald eagle and other wildlife habitat management. The state is required by law to generate income from the state school lands; management objectives for these lands is not necessarily geared toward habitat management. They are interested in acquiring and consolidating state lands outside the ACEC. If this were done, the state could realize more efficient management of state lands and could focus on maximizing economic returns from those lands.

Mineral material alternatives that would make limestone-bearing public lands outside the ACEC available to the state subject to seasonal occupancy restrictions on the patents, in exchange for limestone-bearing state lands in the ACEC, were analyzed. None of these alternatives were identified as preferred alternatives. Through analysis of the potential impacts of limestone development outside the ACEC without seasonal restrictions it was found that these alternatives do not represent the lowest level of restriction necessary for BLM to meet its responsibility to protect the bald eagle habitat and populations in the ACEC.

Mineral materials on public lands outside the ACEC could be exchanged to the state of Wyoming, and material extraction development allowed with no seasonal restrictions, without disturbing bald eagles in the roosts or damaging roost habitat. Analysis revealed that no effect to bald eagles or their habitat is anticipated as a result of exchange and mineral material development of lands outside the ACEC. As identified during analysis, if blasting at a quarry from November 1 through March 31 were allowed only between 10 a.m. and 2 p.m., and public access to the ACEC through a quarry was not allowed, any residual potential for impacts would be further reduced.

Compliance with these conditions should not impose undue hardships on the state or a quarry operator. Blasting restrictions to avoid any possible noise disturbances during mornings and evenings when bald eagles are leaving or entering the roosts fall well within industry and regulatory standards for use of explosives. Restriction of public access to the ACEC through a quarry diminishes any potential for disturbance to eagles using the roosts during the winter. The restriction could be enforced by the state or implemented by a quarry operator without hardship or disruption of operations.

It is necessary to consider what would happen if limestone-bearing public lands outside the ACEC were not made available for exchange and development. It is foreseeable that materials on the 40-acre state land parcel in the ACEC would be developed to meet the high and growing local demand for this limestone. Further, unless like-mineral lands could be acquired by the state, there is little incentive for the state to dispose of the 40-acre parcel in the ACEC.

There is greater potential for disturbance of bald eagles and their habitat if mineral material development occurred on state lands in the ACEC. The state lands are closer to roosts than the public lands south of the ACEC, and they are not screened from view of the roosts by terrain. The state is not required to consult with the FWS to comply with section 7 of the Endangered Species Act before authorizing development; it is subject to enforcement actions under that act if a taking of bald eagles results after development of the state lands is undertaken. Analysis found that a quarry developed on those state lands could have direct adverse impacts to eagles using the roosts.

The ACEC boundary adjustment alternative would establish a southern boundary that effectively screens the sight and sound of activities conducted outside the boundary from bald eagle roosts inside the ACEC. It makes approximately 15,000,000 cubic yards of high quality limestone material south of the ACEC available for development, enough to support a quarry on 80 acres for 20 years. Negligible impacts to bald eagle populations or habitat, or to other land uses or the visual quality of the area are anticipated, and significant benefits to the state and local economy are possible. Limestone is in high demand in the area, as indicated by past interest expressed in development of the 40 acres of state land in the ACEC. The mineral material south of the ACEC is close to Casper and could sustain the area's present and future needs for road construction materials.

Exchange of lands in the ACEC would increase ACEC public land acreage by about 2,500 acres. Correspondingly, an equal value acreage of public lands would transfer to the state of Wyoming, so there should not be an increase of public lands acreage in the resource area or the state. Combined with boundary adjustment aspects of the preferred alternative which would add 245 acres of existing public lands to the ACEC, an additional 2,745 acres of BLM-administered public lands in the ACEC would be subject to access and other land use restrictions under the preferred alternative, enhancing BLM management of bald eagle habitat in the ACEC. Existing authorized uses on exchanged state and public lands could continue without detrimental effects to the present land users.

Public lands acquired by the state would no longer generate monies from payment in lieu of taxes to the counties, and state lands acquired by BLM would not be subject to PILT payments. An exact dollar figure for any possible decrease in PILT payments would not be determined until the state identifies the specific public land acreage they would like to acquire by exchange. However, the monies generated by sale of the mineral materials on public lands the state acquired could exceed a decrease of PILT payments. During analysis of an exchange proposal for specific public and state land parcels, values would be appraised and considered before it could be determined if the exchange would be in the public interest.

Revising the eastern boundary of the ACEC to remove 914 acres of privately owned lands and 35 acres of public lands changes no aspect of private property rights. Whether in or out of the ACEC boundary, the only private surface use requiring BLM authorization is development of 783 acres of federal mineral estate underlying private surface. Restrictions on development of federal minerals outside the eastern boundary would decrease, and occupancy of leases would be allowed. The potential for more travel to the ACEC via mineral development roads is a concern; seasonal restrictions could be applied in the future if necessary to control access into the ACEC. The Natrona County archery range would be outside the ACEC and would no longer be subject to ACEC ORV restrictions. Since the R&PP for the range allows open ORV use within the range, there would be essentially no change from the status quo. Possible increased access into the ACEC that could result from development of residential subdivisions on the private lands is an ACEC management concern under this alternative, but that could be mitigated by implementation of recreation and access preferred alternatives.

In summary, no increase from the existing public land base in the Platte River Resource Area or the state of Wyoming, and no decrease from the existing state land base should result from the preferred alternative. Potentially significant disturbances to bald eagles, and the possibility for a taking of the eagles that use the Jackson ACEC, that could result from development of minerals on state lands in the ACEC could be avoided. Mineral materials in high demand would be made available without imposition of burdensome restrictions on development and without adversely affecting bald eagles. Protection and enhancement of bald eagle habitat in the Jackson Canyon ACEC to meet BLM management objectives could be more efficiently and consistently realized, and the state of Wyoming could achieve similar management benefits and maximize economic returns on state lands.

The removal of private lands from the eastern portion of the ACEC would have a negligible affect on bald eagle populations or habitat and would reduce oil and gas lease restrictions and allow surface development on an additional 818 acres of federal mineral estate. Latitude for future application of federal mineral development restrictions, if proven necessary, would provide continued protection of the bald eagles and roost habitat.

The boundary adjustment preferred alternative makes it possible for BLM to fulfill legislative mandates of the Endangered Species Act by protecting the habitat and population of bald eagles using the ACEC, as well as those of the Federal Land Policy and Management Act to provide for multiple use and sustained yield by making the valuable mineral material commodity available for use.

All Habitat Areas Forestry and Fire Management

Removing 1,323 acres of commercial timber base from the PRRA's total commercial base would reduce the resource area's allowable cut acreage base by 18%, and eliminate obligations to meet this quota. Since 1,210 acres of this base are unsuitable for harvest (either because the timber has been lost in wildfires or because RMP decisions restrict access to the areas), this action would eliminate unattainable budget assignments. Although timber lost to past wildfires could be ready to cut in 80 years, it could not be harvested under current RMP watershed protection and slope occupancy restrictions. Eliminating the commercial timber base designation would not preclude use of timber sales or non-commercial timber harvests if needed to achieve healthy aged and structured timber stands and enhance bald eagle roosting habitat.

Designating bald eagle habitat areas as priority full suppression zones and allowing full suppression with all available resources, which includes using roads and trails and constructing firebreaks or roads, would provide bald eagle habitat the highest degree of protection from destruction by wildfires. As priority full suppression zones, wildfires in bald eagle habitat would receive BLM's first attention over wildfires on less critical lands.

Pursuing cooperative agreements between BLM and others, and preparing initial attack plans to identify where firebreaks or roads are most needed and where protection from wildfire is most critical, would minimize damage or destruction of habitat during wildfire suppression. Implementating cooperative agreements would also reduce the risk of wildfires getting out of control and threatening state or private lands.

Although this alternative has the most potential to damage trees in roosts, it affords the maximum protection of habitat from destruction by wildfire. By restoring and reclaiming any surface disturbance immediately after a fire is suppressed, opportunities for the public to travel into the habitat areas afterwards should be reduced.

Under this alternative, prescribed burning to meet range, wildlife, and timber resource management objectives would be allowed except between November 1 and March 31. This should ensure that bald eagles are not disturbed, but it does present some potential for burns to escape and damage bald eagle habitat. Site-specific planning and analysis would be needed to determine if potential resource benefits outweigh possible impacts from an escaped fire before prescribed burning at specific sites were undertaken.

Implementation of these preferred alternatives would provide BLM the greatest opportunities for enhancement and protection of the timber resource in bald eagle habitat areas. It should minimize the potential for damage or destruction of that habitat, and it would decrease the chance for fires on public lands to threaten state or private lands in the areas. Post-suppression reclamation, and seasonal restrictions on prescribed burning combined with pre-burning site-specific analysis, should result in negligible direct or indirect future impacts to bald eagles or their habitat.

Mineral Materials in Other Roosts, Nests, Feeding and Flyway Habitat Areas

The mineral materials preferred alternatives apply to bald eagle roosts other than the Jackson Canyon ACEC, and to the bald eagle nests, feeding habitat and flyways habitats.

Implementation of the preferred mineral material alternatives would make any mineral materials that may be present within the boundaries of the ten roosts unavailable by continuing the no surface occupancy restrictions on those public lands. The federal mineral estate which would be unavailable for mineral material extraction is approximately 26,400 acres. The potential for occurrences of mineral materials is low in six roosts (18,500 acres), unknown in one (2,494 acres), and moderate in one (1,702 acres). One roost (Miller Hills, 3,414 acres) has high potential, with a low local demand, and one roost (Cole Creek, 314 acres), has high potential, with unknown local demand for federal minerals (state or private lands may be meeting demand).

Before preparing the HMP, RMP decisions made approximately 39,600 acres of federal minerals in roost buffer areas unavailable for mineral material extraction through seasonal and no surface occupancy restrictions. For HMP analysis, BLM, in consultation with the FWS and WGFD, determined what areas comprise the most crucial roosting habitat, and what areas previously subject to year-round or seasonal restrictions were not critical to protect bald eagles and their habitat.

The HMP preferred alternative makes 13,200 more acres of federal minerals available for mineral material extraction, an increase of 33 %. In the areas of high demand, the increase totals approximately 916 acres of federal minerals, or a 24.5 % increase of federal minerals in high demand areas.

Under the preferred alternative, surface development would be prohibited from ¼ to 1 mile of known or discovered nests, with the specific area determined through case-by-case analysis of proposals and consultation with the FWS in accordance with the Endangered Species Act when required. Considering that little or no public lands are present at known nests, minimal impacts to bald eagles or their nesting habitat as a result of BLM-authorized actions is anticipated.

In feeding habitat areas under the preferred alternative, mineral material development within ¼ mile of the North Platte River would continue to be prohibited year-round. Development of mineral materials located within ½ mile of the river would continue to be allowed subject to seasonal restrictions (this does not apply to operation of existing facilities). These restrictions should adequately protect the feeding habitat and bald eagles using the habitat. On 240 acres of federal minerals within ¼ mile of the river (where an expired material sale permit is located next to active private and state pits) continued development and operation would be allowed subject to seasonal restrictions.

Since little mineral material development occurs during the winter, this alternative should not be burdensome to operators. Considering the current active mineral material operations on state and private lands in the feeding habitat areas, allowing continued operation of existing federal mineral facilities during periods when eagles are not using feeding areas should not increase the level of impacts or disturbances from those currently present. Year-round access and use of existing material sites should not be diminished under the preferred alternative.

Analysis has not shown that bald eagles using flyways are disturbed by mineral material operations, and under the preferred alternative proposals for development would be considered on a case-by-case basis. This should ensure that bald eagles and their habitat are considered prior to authorization of new disturbances on public lands.

To summarize, since demand for mineral materials is usually localized because of high transportation costs, making federal minerals in roosts unavailable for disposal should have little regional or statewide significance. There are no known past or current proposals to develop federal mineral materials in roosts, and there is no known foreseeable demand for the materials, especially where the potential for occurrence of mineral materials is low. In areas of high potential, additional acreage that would become available under the preferred alternative could help meet future demand not met by state or private sources.

Through analysis in this HMP it was found that bald eagle habitat in the resource area could be protected, and potential disturbances to eagles in the roosts avoided, through use of year-round no surface occupancy restrictions within the roosts boundaries. Application of seasonal occupancy restrictions in feeding areas, and case-by-case analysis of proposals in nest and flyway areas should ensure no significant disturbances of bald eagles in those habitats results. Implementation of the preferred mineral material alternative should result in no effect to and no taking of the endangered bald eagle species or their habitat. In addition, impacts to industry or the public that may use mineral materials is anticipated to be minimal.

Other Minerals in All Roosts, Nests, Feeding and Flyway Habitat Areas

The other minerals preferred alternatives apply to all bald eagle roosts (including the Jackson Canyon ACEC), and to the bald eagle nests, feeding habitats, and flyways habitats. "Other minerals" addressed are leasable minerals, particularly oil and gas; and, locatable minerals on which mining claims under the General Mining Law of 1872 could be located, developed, and patented.

Under the preferred alternatives, federal mineral estate in all bald eagle roosts, nests, and feeding habitats would be available for oil and gas leasing subject to year-round no surface occupancy lease stipulations. Development of existing oil and gas leases that do not contain a year-round no surface occupancy stipulation would be considered on a case-by-case basis, and consultation with the FWS under the Endangered Species Act undertaken if necessary. Federal mineral estate in bald eagle flyways would continue to be leased subject to site-specific resource stipulations.

Implementation of this alternative would eliminate seasonal no surface occupancy restrictions currently applied to oil and gas lease development on approximately 13,600 acres of federal mineral estate. It would make approximately 37,100 acres of federal mineral estate available for oil and gas leasing and development with year-round no surface occupancy stipulations.

For HMP analysis, BLM, in consultation with the FWS and WGFD, determined what areas comprise the most crucial roosting habitat, and what areas previously subject to year-round or seasonal restrictions were not critical to protect bald eagles and their habitat. Seasonal occupancy restrictions on oil and gas leases allow for subsequent winter access and operations, and it is foreseeable that these continued activities in the critical roost habitat could directly disturb bald eagles using the roosts. These activities could result in bald eagles avoiding or eventually abandoning the roosts. Under the preferred alternative, the established roost boundaries within which leases would be subject to year-round no surface occupancy stipulations represent the least acreage of public lands necessary for protection of bald eagle habitat and populations in the roosts. The preferred alternative would implement the lowest level of restriction necessary for BLM to meet its responsibility to protect bald eagles and their habitat.

The potential for occurrences of oil and gas is unknown in three roosts (one being the ACEC), low in four roosts, and high in four roosts. Where unknown or low potential exists, little or no development of oil and gas leases has been undertaken near the roosts, and development is unlikely to occur in the near future. In the four roosts where high oil and gas potential exists, past development of oil fields or new field exploration near the roosts makes it foreseeable that continued oil and gas lease development will occur.

The preferred alternative would make additional federal mineral estate available, and oil and gas lease holders could design future development to maximize extraction of the federal oil and gas resource near roosts. Year-round no surface occupancy stipulations on oil and gas leases in the roosts would make federal minerals available for development using directional drilling technology and at the same time not be likely to affect bald eagles or their habitat.

In the roosts with unknown or low potential for oil and gas, speculative development in the near future is unlikely, so the possible additional costs associated with directional drilling should have negligible impact on lessees. Where known oil and gas reserves have been or are being developed, potential lessees could decide if it would be economical to obtain a lease which would require directional drilling for development.

Another aspect that must be considered are contentions that year-round no surface occupancy stipulations and the possible additional costs of directional drilling would result in dedicating the federal mineral estate in roosts to non-development. On the other side of this issue is the uncertainty of whether a commitment to allow development on the lease is made by offering leases with year-round no surface occupancy stipulations (although concurrence with the year-round occupancy restriction is a pre-condition of obtaining such a lease). This issue has been examined by the courts in the past, and future litigation that addresses the question could ensue. This is a matter that will have to be resolved by legislation and/or regulation, or the courts; BLM cannot predict the outcome. However, under current leasing guidelines, the preferred alternative would provide for multiple use and sustained yield on the public lands in roosts by making the commodity available for development. Potentially significant disturbances to eagles and the possibility of a taking of eagles that use the roosts would be avoided. The alternative also makes it possible for BLM to comply with the Endangered Species Act by protecting crucial bald eagle habitat and the bald eagles using the roosts.

Through implementation of the preferred alternative, BLM would withdraw all of the federal mineral estate in bald eagle roosts from mining claim location, development, and subsequent patent under the General Mining Law of 1872. The total acreage withdrawn would be approximately 37,100 acres. Detailed mineral reports and validity exams on the claims would be required prior to withdrawal of the lands, and, if valid, those claims could be developed and the lands could leave federal ownership.

Under the preferred alternative, federal mineral estate in bald eagle nests, feeding habitat, and flyways would not be withdrawn. However, eight of the fourteen feeding habitat areas are included within the North Platte River Protective Withdrawal. Those eight areas are Trappers Route landing sites. The 1974 protective withdrawal segregated those lands from appropriation under the mining law. In the remaining six feeding habitat areas, one has moderate potential for occurrences of locatable minerals, and five have low potential.

Within the Jackson Canyon ACEC preferred alternative boundary 10,648.60 acres would be withdrawn. This takes into account the reduction of federal mineral estate in the ACEC from 11,101.42 acres, a total reduction of 452.82 acres.

Approximately 26,400 acres within the ten other roost boundaries would be withdrawn under the preferred alternative. As discussed previously, preferred HMP alternatives would eliminate approximately 13,200 acres of federal mineral estate from roost boundaries used in the past, and thus, from inclusion in a withdrawal.

There are mining claims located on federal minerals in the ACEC, although plans of operations for those claims have not been submitted to BLM. The presence of claims suggests a high potential for locatable minerals in the ACEC, as well as some likelihood that those claims would be developed in the future.

Of the ten other roosts, the potential for occurrences of locatable minerals is unknown in two, low in two, and high in six. There are claims staked in three of the roosts, although plans of operations for those claims have not been submitted to BLM. The presence of mining claims indicates a likelihood that future claim development would be initiated.

Unless withdrawn, claim location and some development could be undertaken in critical roost habitats and could occur while bald eagles are using the roosts without any notice to BLM. Direct and significant impacts to bald eagles could ensue. Before development exceeding "casual use" could be undertaken, a plan of operations would be submitted and consultation with the FWS undertaken, but BLM could not deny or reject plans. As a result, even if mining claims contained mitigating measures designed to minimize impacts to bald eagles or the roosts, remaining residual impacts could result.

The RMP EIS and ROD concluded that federal mineral estate in the Jackson Canyon ACEC should be withdrawn, although action to implement those decisions was not undertaken pending completion of an HMP. Analysis in the HMP affirms that withdrawal in the ACEC would be appropriate and should be undertaken to eliminate possible adverse impacts to bald eagles and roosting habitat that could result from mining claims.

Only three roost areas (including the ACEC) were known to exist when the RMP was prepared in 1985. At that time, withdrawal was considered only for the ACEC, with RMP decisions requiring an HMP be prepared to consider management of bald eagle habitat. HMP analysis has revealed the significance of bald eagle roosts in the resource area to bald eagle populations. The reasonably foreseeable future mining claim development which could be undertaken in those roosts, and the potential impacts which could result from that development, demonstrate that the preferred alternative would be the most reasonable and prudent action for BLM to take to meet its responsibilities under the Endangered Species Act.

In summary, other minerals preferred alternatives would result in making additional federal mineral estate available for oil and gas lease development without seasonal occupancy restrictions. Potentially significant disturbances to bald eagles using critical roost habitat, and the possibility for a taking of eagles using the roosts, that could result from development of federal oil and gas minerals could be avoided. When the potential for oil and gas occurrences in the roosts is considered, the preferred alternative should not adversely affect the commodity industry.

Under the preferred alternatives, withdrawing the federal mineral estate in roosts and segregating it from appropriation under the mining laws should eliminate the potential for direct, significant impacts to bald eagle populations or the roost habitat. Where claims have been staked in the roosts, examinations to determine if claims are valid would allow continuation of valid claims, which would protect claimants rights. Compliance with the Endangered Species Act for claim development would minimize impacts to bald eagles and their habitat in these cases, although residual impacts could remain.

The preferred alternatives makes it possible for BLM to fulfill legislative responsibilities under the Endangered Species Act to protect bald eagle populations and habitat, as well as the mandates of the Federal Land Policy and Management Act to provide for multiple use and sustained yield. In the feeding and flyway habitats of the North Platte River, proposals to develop oil and gas outside the year-round no surface occupancy area, or mining claim plans, would be considered case by case. This would allow identification of the resource values present and any mitigating measures which would be needed.

CHAPTER 6: EVALUATION AND MONITORING

INTRODUCTION

Major evaluation and monitoring efforts are discussed in this section. The purpose is to track and evaluate bald eagle populations, nesting success, habitat condition and use, and to provide a means to evaluate the results of the HMP alternatives implemented. Regardless of the alternative(s) implemented, the BLM is committed to assuring that an adequate evaluation and monitoring program is undertaken in coordination with the FWS and WGFD. Enforcement of any seasonal or use restrictions will require cooperation between the BLM, FWS, WGFD and the public land users. Form 6780-2 in the "HMP Progress Report" section shows what efforts would be undertaken over the next 10 years under this HMP.

BALD EAGLE WINTER COUNTS

Winter roost counts of bald and golden eagles would be conducted at each ACEC roost (Jackson Canyon and Little Red Creek roosts) every year and at other roosts at least once every three years. Several counts per winter at a roost would allow for monitoring the variation of use that occurs. Simultaneous counts at many of the roosts could be done during Audubon Christmas counts or National Wildlife Federation (NWF) mid-winter counts (these are done every three years). Simultaneous counts would give an indication of the wintering population in the area. Monitoring counts must be coordinated with other agencies and groups to minimize activity at the roosts which would disturb the eagles.

A field form is needed for winter roost counts. Information should include beginning and end times of survey; weather conditions; numbers, species, and relative age class (adult or immature) of eagles counted. The NWF "Midwinter Bald Eagle Survey Standardized Survey Field Form" would be an acceptable form (appendix M).

Eagle use of important feeding areas (Alcova to Casper and Glenrock to Douglas) would be monitored each year to identify if use of the areas is consistent from year to year. A report should include the locations and numbers of eagles, habitat type, perch structure (if perched), feeding behavior, and prey species (if these can be assessed). Additionally, any conflicts between eagle use and human activity that may be present would be identified.

Flyways would be monitored at least once every three years to identify if eagles continue to use these flyways in the future. A report should include the locations and numbers of eagles, habitat type, direction of flights, and any feeding behavior and prey species (if these can be assessed).

POPULATION MONITORING

The midwinter bald eagle survey, which is sponsored by the NWF, could serve as an estimate or index of the number of bald eagles which winter in central Wyoming. This survey is completed every third year (1989, 1992, ...) in

Wyoming under the leadership of the WGFD. State and federal agencies and other groups and individuals do the survey work during a two-week period in January. The survey, though incomplete in its coverage, is the best estimate of bald eagles. It is recommended that some additional survey be done under this HMP to increase the coverage of the survey. An aerial survey of the North Platte River within the resource area (Pathfinder Reservoir to Nebraska border) could be done during the midwinter survey every third year. The river should be covered as quickly as possible (during one day) to minimize duplication in the counting. This would give a count of bald eagles which are feeding in association with the river.

The public would be encouraged and organized to survey roosts simultaneously to maximize the number of roosts covered during these midwinter surveys. The simultaneous counts from roosts which are distant from the river could be added to the river aerial count to give an index (and estimate) of bald eagles in central Wyoming.

BALD EAGLE NEST SURVEYS

Nests would be checked four times annually: (1) in late February/early March to determine if adults are present and if the nest is occupied, (2) in April to determine if incubation has begun, (3) in mid-May to mid-June to verify adult brooding behavior, and (4) in July to identify the number of nestlings which, presumably, will fledge (dates are from WGFD Raptor Nesting Chronology unpublished notes). More precise timing of these nest visits will need to be identified through experience with nesting bald eagles in the lower North Platte River zone. In event of breeding failures, FWS and WGFD would be contacted should they need to recover failed eggs or shells. Special precautions for nest surveys of endangered species are described in BLM Technical Note TN-316 (Call 1978).

COMMUNAL ROOST HABITAT SURVEYS

Roost and buffer forest stands would be checked during the summer every three years to ensure early detection of insect infestations or disease. The location, number, and size of any trees infested or diseased would be recorded. Sanitation treatments would follow if disease or infestations are judged to endanger the roost habitat. If removal of the trees is not necessary, the infested trees would be tagged to document how long the dead trees remain standing.

When disease or insect infestation treatments are undertaken, BLM would evaluate the effectiveness of the treatments each year, and track:

number of trees removed (or otherwise treated);
use of insect baits and traps if applicable;
use of pine tar repellants if applicable;
use of systemic insecticides if applicable.

A written report would be needed to evaluate whether future control efforts are warranted.

The forest stand stocking density (number of live trees per acre) and canopy cover (average percent of the ground covered by tree canopy) of the roosts and buffer areas would be monitored at least every six years. This would give early identification of any need to plant replacement seedlings. The survival of any seedlings planted would be checked annually for the first three years, then every sixth year thereafter. Any significant competition between roost trees and nondesirable species (subalpine fir, juniper) would be checked during the sixth year surveys. Also during the sixth year inspections, wildfire hazards, such as forest litter, brush and subalpine fir thickets would be monitored.

PUBLIC USE SURVEYS

Recreational and other public use in the ACEC would be checked annually each winter (especially after heavy snows) for disturbances to eagles using the roosts or flying to or from them. The other study area roosts would be checked every three years for recreational and other public use which may conflict with bald eagle use of the roosts. (Aerial surveys after heavy snows would be an efficient monitoring method for these other roosts.) Recreational activities (winter hunting and fishing) at the North Platte River high concentration feeding areas and nest sites would be checked annually for disturbances to bald eagles using these areas. A questionnaire would be distributed to grazing lessees and other users to identify the usefulness of the public education program for feeding area habitat improvement. These public use surveys would then be documented to provide a historical basis for future analysis of management needs.

COTTONWOOD PLANTINGS AND STRUCTURE MAINTENANCE

The survival rate of planted cottonwood seedlings and the maintenance needs of the exclosures would be checked each year for the first three years. During the fourth year, the exclosures would be removed and individual trees wrapped with protective net-type wire. Every three years thereafter, the trees and wire wrappings as well as the stability of artificial perches, would be checked.

REPORT OF RECOVERY PLAN EFFORTS

All work-related recovery efforts, including expenditures, accomplishments, and research results, would be reported annually to the FWS regional office in Portland by September 30.

COORDINATION MEETINGS AND HMP REVIEW

A meeting would be held every two years with FSW, WGFD, Murie Audubon Society, The Nature Conservancy, and other interested parties to review this HMP and the progress made. When the RMP is reviewed (sometime in 1995), review of the HMP will be part of that process. However, it may be too early after initial implementation to reveal actual progress from the HMP. Formal review of this HMP is planned for 10 years after signature. Coordination with involved parties would be made before modification of the HMP.

CHAPTER 7: HABITAT MANAGEMENT PLAN PROGRESS REPORT

INTRODUCTION

The HMP progress report, included on the following forms 6780-2, comes after the "Evaluation and Monitoring" section to provide resource specialists and management the opportunity to view and compare the "Management Objectives," "Planned Actions," and "Evaluation and Monitoring" sections and verify their coordination. It also permits all parties to track HMP progress throughout its implementation.

Until a decision is made selecting the planned actions that would be implemented on public lands, the incomplete forms prepared for the November 4, 1991 draft HMP are included in this section. Upon issuance of a final decision, the selected planned actions will be entered onto form 6780-2 and used for HMP tracking and progress reports during HMP implementation.

FORM 6780-2

The HMP progress report, consisting of four pages of form 6780-2, follows.

Form 6780–2
(July 1981)
(formerly 6620–3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HABITAT MANAGEMENT PLAN PROGRESS REPORT

OBJECTIVES	DATE COMPLETED	PLANNED ACTIONS	DATE COMPLETED	EVALUATION/MONITORING	DATE COMPLETED
1. Bald Eagle Roosts 1.a. Improve or maintain _____ acres of night communal roosting habitat in the ACEC.		1.a. List the planned actions from each of the proposed alternatives that apply to ACEC roost habitat: - Recreation Alt. __: - Access Alt. __: - Exchange Alt. __: - Forestry Alt. __: - Fire Management Alt. __: - Mineral Materials Alt. __: - Other Minerals Alt. __:		1.a. Bald eagle roost counts Roost habitat surveys of canopy cover, stocking density, and competition Treatments (if needed) of disease or insect infestations Public use surveys (and compliance) (Other monitoring may be needed, depending upon alternative selected.)	

INSTRUCTIONS

1. List specific HMP objectives as developed from RMP/MFP planning documents or as otherwise approved.
2. List specific planned actions to be initiated to meet each specific objective.
3. List scheduled evaluation/monitoring study(s) planned to evaluate accomplishments.
4. Enter completion date for each objective, action, or evaluation/monitoring study as accomplished.

GPO 841-060

Form 6780–2
(July 1981)
(formerly 6620–3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HABITAT MANAGEMENT PLAN PROGRESS REPORT

OBJECTIVES	DATE COMPLETED	PLANNED ACTIONS	DATE COMPLETED	EVALUATION/MONITORING	DATE COMPLETED
1.b. Improve or maintain _____ acres of night communal roost habitat in other parts of the resource area.		1.b. List the planned actions from each of the proposed alternatives that apply to other roost habitat: - Access, Recreation, and Other Land Uses Alt. __: - Fire Management Alt. __: - Minerals Alt. __:		1.b. Bald eagle roost counts Roost habitat surveys of canopy cover, stocking density, and competition Treatments (if needed) of disease or insect infestations Public use surveys (and compliance) (Other monitoring may be needed, depending upon alternative selected.)	

INSTRUCTIONS

1. List specific HMP objectives as developed from RMP/MFP planning documents or as otherwise approved.
2. List specific planned actions to be initiated to meet each specific objective.
3. List scheduled evaluation/monitoring study(s) planned to evaluate accomplishments.
4. Enter completion date for each objective, action, or evaluation/monitoring study as accomplished.

GPO 841-060

Form 6780-2
(July 1981)
(formerly 6620-3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HABITAT MANAGEMENT PLAN PROGRESS REPORT

OBJECTIVES	DATE COMPLETED	PLANNED ACTIONS	DATE COMPLETED	EVALUATION/MONITORING	DATE COMPLETED
2. Feeding Areas					
2.a. Improve or maintain _____ acres of North Platte River habitat.		2.a. List the planned actions of either Alt. A. or B., whichever is chosen.		2.a. Survey bald eagle use at river concentration feeding areas. Survey public use (compliance). Check cottonwood trees and exclosures (or tree wrappings).	
2.b. Improve or maintain _____ acres of rangeland feeding habitat.		2.b. List the planned actions of Alt. A., B., or C., whichever is chosen.		2.b. Survey livestock operators to identify usefulness of the public education program.	
3. Flyways					
Manage flyway habitat to avoid hazards to bald eagles.		3. List the planned actions of either Alt. A. or B., whichever is chosen.		3. Survey bald eagle use at flyways. Public use surveys (and compliance)	

INSTRUCTIONS

1. List specific HMP objectives as developed from RMP/MFP planning documents or as otherwise approved.
2. List specific planned actions to be initiated to meet each specific objective.
3. List scheduled evaluation/monitoring study(s) planned to evaluate accomplishments.
4. Enter completion date for each objective, action, or evaluation/monitoring study as accomplished.

GPO 841-060

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HABITAT MANAGEMENT PLAN PROGRESS REPORT

OBJECTIVES	DATE COMPLETED	PLANNED ACTIONS	DATE COMPLETED	EVALUATION/MONITORING	DATE COMPLETED
4. Nests Maintain or improve nesting habitat for any identified nests.		4. List the planned actions of either Alt. A. or B., whichever is chosen.		4. Conduct nesting surveys. Survey public use.	

INSTRUCTIONS

1. List specific HMP objectives as developed from RMP/MFP planning documents or as otherwise approved.
2. List specific planned actions to be initiated to meet each specific objective.
3. List scheduled evaluation/monitoring study(s) planned to evaluate accomplishments.
4. Enter completion date for each objective, action, or evaluation/monitoring study as accomplished.

GPO 841–060

CHAPTER 8: CONSULTATION AND COORDINATION

INTRODUCTION

Coordination of HMP development has been undertaken by an interdisciplinary team to ensure multiple use management consistent with RMP decisions. Informal consultation and coordination with the FWS and WGFD have been ongoing throughout preparation of the HMP. Public scoping meetings to discuss HMP development were conducted, information was distributed to interested parties, and public comments were sought, as discussed in the "Public Affairs" section. Public comments and data supplied were analyzed by the HMP team, and used toward formulation of the alternatives found in the "Planned Actions" section. Comments and data supplied were also used to revise or correct the draft HMP where appropriate.

COORDINATION WITHIN BLM, AND WITH OTHER AGENCIES

The BLM team members from the PRRA and Casper District offices, and their respective HMP preparation responsibilities, are listed below.

Dan Benoit, Geologist	General Setting, Geology, Minerals
Charlie Fifield, Range Conservationist	Soils and Vegetation, Rangeland Resources
Willie Fitzgerald, Wildlife Biologist	Wildlife Resources
Pat Hiller, Writer-Editor	HMP Editing
Jim Johnson, Fire Management Officer	Fire Management
Dorothy Moore, Staff Assistant	Automated Processing
Bill Mortimer, PRRA Area Manager	HMP Spokesperson
Kate DuPont Padilla, Public Affairs Officer	Public Affairs
Gordon Simon, Cartographer	Maps, HMP Printing
Celia Skillman, Realty Specialist	Team Leader
Randy Sorenson, Realty Specialist	Land Status and Uses, Access, Recreation, Land Use Capability
Don Whyde, Assistant District Manager, Lands and Renewable Resources	Forestry

Informal consultation with the FWS in accordance with the Endangered Species Act, and coordination with the WGFD in accordance with interagency agreements, included meetings between BLM, FWS and WGFD; review and comment by FWS and WGFD of draft sections as they were prepared; and, review and comment of the November 4, 1991 draft HMP by the FWS and WGFD. Discussions at meetings helped BLM formulate planned actions and identify the environmental consequences of those alternatives. Information provided by FWS and WGFD was incorporated into the appropriate sections, and was used to ascertain consequences of the planned actions on affected resources.

In addition to these agencies, coordination with the county commissioners for Natrona, Converse, Platte and Goshen counties was undertaken through letters or meetings. Each commission received a copy of the draft HMP for review and comment. State government agencies given opportunities for input in the HMP include the Forestry Division, Highway Department, and the Land Commission. The draft HMP was also reviewed by the BOR.

COORDINATION WITH ORGANIZATIONS AND THE PUBLIC

As discussed in more detail in the "Public Affairs" section, all parties that indicated an interest in the HMP, or are authorized users of public lands within the HMP area, received written notice when the draft HMP became available for review. The mailing list of parties notified is contained in appendix N, and the listing of parties provided a copy of the draft HMP is contained in appendix O. Those receiving a copy of the draft HMP were requested to make their copy available for review upon request from their constituents, staff members, or clients. Comments received on the draft were numerous, and many presented information that was not provided during HMP scoping. All written comments were provided to the FWS and WGFD for their consideration as well.

Over 50 written comments that included the commenters name and address were received. Numerous comments in the form of a copy of an extracted page of the Planned Action access alternatives for the Jackson Canyon ACEC were received. Most of these were signed but without the commenter's address; many only contained an indication of a preference for one of the analyzed alternatives. All comments that included a mailing address and were received within a week of the comment deadline were acknowledged by letter dated December 24, 1991 (appendix P).

RESULTS OF COORDINATION

Review of comments on the draft HMP revealed that many readers apparently believed that the alternatives considered in the draft HMP included and would apply to private lands. In an effort to reduce confusion, the BLM's December 24, 1991 letter to commenters reemphasized, and the final HMP includes more frequent statements to clearly identify, that actions considered and any decisions made pertain only to bald eagle habitat areas located on the public lands. On private surface-federal minerals, BLM's management is confined to leasing oil and gas or permitting oil well drilling, and to disposal of minerals found on those lands. Added discussion of this should clarify what management responsibilities BLM has for private surface-federal mineral lands. At no time during HMP development did BLM consider that the HMP or any decisions reached as result of HMP analysis would apply to non-mineral uses of private lands or regulate private land owner rights.

In response to the many comments opposing continued inclusion of a block of privately owned lands in the eastern portion of the ACEC, and the fact that inclusion of those lands in the ACEC carries no force on private landowner uses of those lands, BLM believed that consideration of an alternative that would remove those lands from the ACEC boundary was warranted.

Review of the comments received from the Commissioner, Wyoming State Land and Farm Loan Office, the Petroleum Association of Wyoming, and Rissler-McMurry Company revealed that consideration of a boundary adjustment alternative for the ACEC that did not include a seasonal restriction on mineral development on lands that would be outside the ACEC was warranted.

Other revisions made to the draft HMP include revision of the boundary of the Cole Creek roost area to eliminate private surface-private mineral lands from the roost boundary, and revision of the Rawhide nest boundary to correct drafting errors. Alternatives were revised to clarify what was being analyzed, and errors in the dates applied to seasonal restrictions on land uses in bald eagle nesting areas were corrected. New appendices and tables that include more information on the lands and minerals status of roosts and nests habitat areas were added. A list showing major revisions made to the draft HMP is included as Appendix Q.

CHAPTER 9: WILDLIFE ECONOMICS

GUIDELINES

BLM Manual guidance states that the final, approved HMP must represent either the least costly approach for accomplishing precisely specified objectives or the most beneficial approach to solving the general problems or accomplishing the goals identified in the plan. By choosing the least expensive habitat improvement alternatives or the minimum level of restrictions on land uses in habitat areas this can be done. When management objectives are solely concerned with non-priced effects such as protecting populations of threatened and endangered species, and benefits of a plan can be estimated only in biological terms, it is appropriate that the analysis not attempt to estimate costs of the objectives in monetary terms.

The HMP must represent the most beneficial and cost effective management approach to protecting the endangered bald eagle populations in the PRRA. The principal benefits of this HMP to bald eagles could only be estimated in biological terms (that is, good body condition of eagles due to their not being disturbed from favored areas).

In other words, an analysis of the economics of the HMP does not require that monetary costs of the benefits of wildlife habitat improvement be established, but does require that the alternative(s) selected benefit bald eagles and achieve the specified management objectives. The final, approved HMP must represent the least management cost of the alternatives considered to protect the endangered bald eagle habitats and populations.

IMPLEMENTATION

The "Environmental Consequences" section of this HMP identifies an economic benefit or cost of alternatives where such factors could be identified. The dollar value of the benefit or cost to bald eagles and their habitat could not be determined during analysis of the alternatives. The management objectives of this HMP are solely concerned with non-priced, biological effects on bald eagle habitat, and the BLM's responsibility to protect the bald eagle habitat and populations in consultation and coordination with FWS and WGFD. Although the least cost of habitat improvements and the lowest level of restrictions on other land uses are included in analysis of the alternatives, consideration of the economic costs alone cannot prevail over the biological benefits or costs of the alternatives.

BLM will strive to allocate funds through the annual budget process for personnel and materials for project work necessary to implement HMP decisions. Much of the costs of personnel fall within the "cost of doing business," although some specific projects (such as exchange of lands) require that BLM estimate total cost of the project and receive approval in the annual budget prior to undertaking the work. In the same way, the cost of materials and labor to construct projects (such as barriers or bald eagle perches) is estimated in annual budgets and funds must be allocated before the projects are constructed.

The "Public Affairs" section includes estimates of some costs that would be associated with public outreach that could benefit bald eagles. Much of the public outreach work would fall under the category of regular BLM business, but with an HMP it would emphasize public education about the HMP objectives and decisions.

According to BLM budget tracking systems, in 1991 and 1992 (to March 7, 1992), the cost of personnel assigned to work on the HMP to research, write and prepare the document, and perform coordination with the FWS, WGFD, and the public, was approximately $51,000. The cost of distribution copies of the HMP is included in the "Public Affairs" section.

CHAPTER 10: PUBLIC AFFAIRS

INTRODUCTION

The "Public Affairs" section of this HMP is prepared, and is to be implemented as a joint effort between the resource specialists in the PRRA and the Casper District Public Affairs Specialist. The purpose of this section is to inform state and federal agencies and other interested public groups or individuals (especially affected landowners) of HMP objectives and planned actions.

PUBLIC PARTICIPATION

A primary consideration in developing the Platte River Resource Area and Jackson Canyon ACEC Bald Eagle Habitat Management Plan was to solicit public comment and encourage public involvement. A public affairs scoping plan (Appendix R) was approved for implementation February 20, 1991 as part of an HMP preparation plan. Eight scoping meetings were conducted in March followed by a public meeting April 4, 1991. Notice of the meetings was mailed to Wyoming State Government officials and agencies, Natrona County commissioners, Natrona County legislators, and Wyoming's congressional delegation and their field staff. Known landowners in and adjacent to the ACEC, recreation organizations and clubs, conservation groups, mineral interests, wildlife protection groups, and economic development interests were also sent a notice of scoping meetings.

Preparation for the scoping meetings and a public meeting included development of a pre-taped audio slide program about the ACEC and HMP; an ACEC/HMP fact sheet with background information; maps of the ACEC and other resource area bald eagle habitats; and a question and answer paper on BLM's HMP and land use planning process.

At the scoping meetings and public meeting, the resource uses and their potential conflict with protection and management of bald eagle habitat were discussed, and comments about public land and resource management were solicited. Handouts provided to all meeting attendees are contained in appendix S.

Appendix T contains the names of all parties notified of the March scoping meetings, who attended each meeting, and the agenda followed at each meeting. Appendix U includes the letter used to notify parties of the April public meeting, and the mailing list for the letter.

The scoping meeting schedule was as follows:

March 7:	Congressional Delegation
March 8:	Wyoming State Officials,
March 14 (3 meetings):	Recreational Users; Natrona County Legislators; Landowners and lessees within study area
March 15:	The Murie Audubon Society, The Nature Conservancy, and the Izaak Walton League
March 18 (3 meetings):	Natrona County Commissioners; Commodity users; Economic development groups

The public meeting, held April 4, 1991 at the BLM Casper District Office, was attended by approximately 75 persons (appendix V). Advance notice of the meeting was reported by Natrona County's four news outlets, The Casper Star-Tribune, KTWO Television, KGWN Television, and The Casper Journal. The news release issued to the media is contained in Appendix W. The Casper television stations and The Casper Star-Tribune issued news reports on the HMP before and after the public meeting, and some Casper radio stations reported on the meeting.

Known landowners and parties holding BLM land use authorizations or leases near bald eagle roosts or nests outside the Jackson Canyon ACEC were sent an information letter about the HMP, were provided the handouts used at the scoping and public meetings, and were asked for their comments on management of the bald eagle habitat areas. Appendix X includes the letters used to inform those parties of the HMP and a mailing list of parties sent the letter.

All written public comments are part of the official HMP record kept on file in the PRRA office. The record can be reviewed upon request. Many of the planned action alternatives were developed as a direct result of comments received from the general public, state officials and agencies, and parties with interests in management of the bald eagle habitat areas.

Public participation was encouraged when the draft HMP was completed. Public notice of the availability of the draft HMP was issued by letter on November 4, 1991 with a 30-day public comment period set. Persons previously notified by letter of the HMP preparation, those who attended scoping meetings, and all parties which expressed an interest in the HMP were notified by letter when the draft was made available for review, and were informed where copies have been sent (appendix Y).

Copies of the draft HMP were made available in various public locations throughout Natrona, Converse, Platte and Goshen Counties, and were provided to state, county and federal agencies and departments for their review and comment. Those parties were requested to make their copy available to their constituents upon request. A press release, which included a copy of the draft HMP, was issued to the Natrona County news media. The Casper Star Star-Tribune did not print the release, so upon discovering this, the BLM purchased a public notice advertisement which was printed in the November 26 and 27, 1991 issues (appendix Z), but did not extend the comment period because widespread notification had been accomplished through the November 4 letter.

Written comments received on the draft HMP were reviewed by the HMP team, and BLM determined that the substance of, and new data received in, those comments warranted analysis of an ACEC boundary alternative. Copies of the written comments were provided to the FWS and WGFD for their review, and during a meeting with FWS and WGFD December 19, 1991, the "Boundary Adjustment Alternative" was discussed. Following that meeting, BLM outlined the alternative and discussed the need for analysis of the alternative with the Natrona County Commissioners, The Nature Conservancy, the Murie Audubon Society, and the Natrona County Parks Department through informal meetings and telephone discussions. Subsequently, the environmental consequences of the alternative were determined and prepared by the HMP team, in consultation with the FWS and WGFD.

The public will be kept informed of the decisions made regarding HMP alternatives, HMP implementation, and BLM's plans for the continued actions for the protection of bald eagle habitat. Implementation of decisions will provide for continued public participation. Details on those opportunities will be outlined in the HMP Decision Record.

The official record is open to the public (with the exception of nest maps and legal descriptions), and is available for review at the Platte River Resource Area Office, 815 Connie Street, Mills, Wyoming. The files contain the names and addresses of those sent notice of the various scoping meetings, lists of attendees, and notes or summaries of the comments and issues discussed. The record also includes written comments received and BLM's written responses to those comments. All of these documents are considered official HMP records, will be maintained for reference during HMP implementation, and are available for public review.

PUBLIC AFFAIRS ACTION PLAN

Upon completion, the final HMP, including the decision record, will be provided to the cooperating agencies (the WGFD and the USFWS). Copies will also be provided to appropriate state, county, and local agencies.

This public affairs action plan will include various activities to promote HMP objectives and the mission of the BLM. One of BLM's objective is educational in nature. The action plan includes an education tour each year; on every third year the tour would coincide with the midwinter survey of bald eagles.

A brochure will be developed that will include maps and cartography pertaining to the HMP area. The brochure will be educational in nature and will promote the overall protection of the bald eagle habitat. For use at public meetings and by various organizations and schools, a video tape of Jackson Canyon, the natural resource values found in the Jackson Canyon ACEC, and overall objectives for management of the area will be included.

Interpretive signs will be designed and installed at public access sites to the Jackson Canyon ACEC. Signs will indicate any restrictions for use of the area and the rationale behind those ACEC and HMP management decisions.

Because of growing interest in wildlife, especially endangered species, the BLM will identify opportunities to submit news articles and feature stories to various news media, including promotional and educational magazines.

ACTION PLAN IMPLEMENTATION

INTRODUCTION

In the following discussion of the HMP public affairs plan implementation, personnel costs are expressed in terms of work months for BLM employees. For the purposes of this section, the average work month cost used is $3,000; the actual amount may be less, depending on the wages of personnel assigned to perform specific implementation tasks. Materials, construction, or printing costs are estimated using the cost to the BLM for procurement of those materials or services.

HMP PRINTING AND DISTRIBUTION

BLM will have a limited printing and distribution of the final HMP for participating agencies and groups we believe will need the document. Since the HMP will be fairly lengthy, portions of it could be extracted for distribution to other interested parties upon their request. Another reason for not distributing the complete HMP to the general public is that there is sensitive information (written details and maps of specific nest sites) that should not be released. For review during the comment period, the draft HMP sent to any party other than the FWS and WGFD did not contain bald eagle nest legal descriptions or detailed maps of the nest area. The draft HMP was distributed as follows:

Copies of complete HMP

U. S. Fish & Wildlife Service
Wyoming Game & Fish Dept.

Copies of HMP without nest maps

BLM Casper District Advisory Council
Casper Mountain Fire District
Congressman Thomas, Casper Field Office
Converse County Commissioners
Converse County Fire Department
Converse County Library
Friends of Bessemer Mountain
Goshen County Commissioners
Goshen County Library
Murie Audubon Society
Natrona County Commissioners
Natrona County Fire Department
Natrona County Library
Natrona County Parks Department
Natrona County Planning Department
The Nature Conservancy
Petroleum Association of Wyoming
Platte County Commissioners
Platte County Library
Rissler and McMurry Company
Rocky Mountain Oil and Gas Association
Senator Simpson, Casper Field Office
Senator Wallop, Casper Field Office
Sierra Club, Laramie
State of Wyoming, Forestry Division
State of Wyoming, Highway Department
State of Wyoming, Land Commission
Wyoming Mining Association
By Request: Wyoming Girl Scout Council
(not on original distribution)

The cost of distribution copies of the draft HMP, not including the cost of personnel that wrote the draft, was approximately $700.00. The same cost is anticipated for distribution copies of the final HMP. Costs associated with sending letters to those on the HMP mailing list was not tracked; the paid advertisement notice in The Casper Star-Tribune cost $132.00.

INTERPRETIVE SIGNS

Four interpretive signs would be installed for public informational purposes. Three signs would be installed on public lands (T. 31 N., R. 80 W., Sec. 2, NE¼SW¼ and T. 32 N., R. 80 W., Sec. 25, NE¼NE¼ and SE¼SW¼) to describe the resources, show the designated roads and trails, and identify the activities which the public is restricted from doing. We would also work with the county to develop and install a sign at the Archery Range that would provide interpretation of the bald eagle resource.

The cost of sign materials and construction is estimated at $400.00, and approximately one workmonth ($3,000) would be used in sign design and installation.

CONSTRUCTION PROJECTS

Public land property line identification is needed to implement management efforts without trespassing upon private lands. The BLM Casper District division of operations would be requested to perform surveys in the ACEC to provide positive identification of property lines at the roosts fences could be constructed. Approximately 3 miles of survey at the two roosts would be necessary to establish fences. A cultural resource inventory of the fence line would also be needed.

Personnel costs to perform survey and design work is estimated at two workmonths ($6,000), and approximately $7,500 would be required for buck-and-pole fence materials and construction.

BROCHURE

An HMP brochure would be helpful to provide the visitor to central Wyoming with information about the bald eagles and how to observe them. In the brochure, specific suggestions for what the public (and grazing lessees in particular) could do to benefit bald eagle habitat and to minimize disturbance to bald eagles could be included.

Brochure origination cost is estimated at one workmonth ($3,000), and initial printing costs of $2,000 are anticipated.

VIDEO TAPE

A video tape of the natural resource values found in the ACEC and other bald eagle habitat areas, and HMP management objectives would be developed for use at public meetings and by various organizations and schools.

Video tape planning and development may require up to three workmonths ($9,000), and costs of up to $3,000 are anticipated for materials and finished tape preparation.

EDUCATION TOURS

Yearly education tours to the general area near the ACEC would be conducted. These could increase public awareness of the bald eagle resource, and every three years could be conducted in January to coincide with the NWF midwinter survey.

Personnel costs, the only cost anticipated for this action item, are estimated at one-half workmonth ($1,500) yearly.

PROMOTION

Articles would be written for publications such as BLM's quarterly Wyoming Horizons magazine, and submitted to any other suitable media for publication. The cost of personnel to write, edit and submit the articles is estimated at one workmonth ($3,000) per year, and procurement costs of approximately $100 per year are anticipated.

SUMMARY

The total estimated costs for implementation of the HMP public affairs action plan include a one-time costs, and yearly, recurring costs. Obviously, all of these actions cannot be implemented in the first year following approval of a final HMP, but will be integrated into the BLM's budget and implemented as identified in the HMP "Progress Report" section.

Personnel - 7 work months	$21,000	One-time cost
- 1 ½ work months	4,500	Yearly cost
HMP Copies	1,400	One-time cost
Interpretive Signs	400	One-time cost
Construction Project	7,500	One-time cost
Brochure	2,000	One-time cost
Video Tape	3,000	One-time cost
Promotion	100	Yearly cost
Total One-Time Costs	$39,900	
Total Yearly Costs	$ 4,600	

APPENDIX A

STATE OF WYOMING LANDS IDENTIFIED FOR ACQUISITION BY BLM BY EXCHANGE

Mineral Status
S = State
F = Federal

Goldeneye Reservoir

T. 35 N., R. 82 W.		
Section 8, SW¼NE¼, S½NW¼, NE¼SW¼, W½SE¼, SE¼SE¼.	280.00	S

Containing 280.00 acres in Natrona County, Wyoming.

Jackson Canyon

T. 31 N., R. 80 W.		
Section 2, SW¼NE¼, NE¼SW¼, N½SE¼;	160.00	S
Section 3, lots 1, 2, 3, 4, S½N½, NW¼SW¼;	360.67	S
Section 4, SE¼SE¼.	40.00	S
T. 32 N., R. 80 W.		
Section 5, SW¼NE¼, N½SE¼, SW¼SE¼;	160.00	S
Section 8, E½;	320.00	F
Section 9, S½;	320.00	F
Section 10, SW¼, NW¼SE¼;	200.00	F
Section 13, W½SW¼, SE¼SW¼;	120.00	F
Section 13, NE¼SW¼, W½SE¼;	120.00	S
Section 15, N½NW¼;	80.00	F
Section 16, all;	640.00	S
Section 17, NE¼;	160.00	F
Section 24, NW¼NE¼;	40.00	S
Section 26, W½;	320.00	S
Section 28, W½;	320.00	F
Section 29, E½;	320.00	F
Section 32, N½NE¼;	80.00	F
Section 33, N½NW¼;	80.00	F
Section 34, SE¼SE¼;	40.00	S
Section 35, W½;	320.00	S
Section 36, all.	640.00	S

Containing 4,840.67 acres in Natrona County, Wyoming.

A total of 6,166.81 acres of federal land and 5,120.67 acres of state land are affected.

On 2,000 acres of State land the minerals are federal, leaving 3,120.67 acres with State minerals.

On 640 acres of federal land, the minerals are non-federal.

APPENDIX B

CONSULTATION PROCESS UNDER THE ENDANGERED SPECIES ACT

On a case-by-case basis, the following steps are taken to ensure BLM compliance with Section 7 of the Endangered Species Act (ESA) when assessing public/industry-initiated proposals requiring BLM authorization, and BLM-initiated proposals or actions. The flow chart at the end of this appendix illustrates these steps.

Proposal Review Not Requiring Consultation

BLM reviews each proposed action to determine if threatened or endangered (T&E) species, species proposed for listing, or candidate species or their habitats may be in the area of the project.

> If there are no known species or habitat, BLM completes analysis of the proposal and may authorize or proceed with the action without consultation under the ESA.

OR

> If the proposal may involve a listed species, and BLM determines that there is "no affect" to T&E species or their habitat, BLM completes proposal analysis and may authorize or proceed with the action without consultation under the ESA; compliance with Section 7 has been accomplished.

Proposal Review Requiring Informal Consultation

If BLM determines that the proposal "may affect" T&E species or their habitat, or if BLM is unsure whether there may be an effect, BLM may informally contact the FWS and ask for advice. This is informal consultation. There is no established timeframe for BLM to initiate informal consultation, but in practice, BLM would act within established time constraints for proposal processing.

Informal consultation is optional. Any discussions or correspondence are designed to assist BLM determine if formal consultation is required. These informal contacts are also used to formulate alternatives that avoid any adverse effects to T&E species or their habitat.

> If BLM is concerned that a proposal "may affect" T&E species or their habitat, BLM may coordinate with the proponent to modify the proposal so it would have "no affect" on T&E species or their habitat. The FWS may also participate in this process.

OR

> If the proposed action cannot be modified to achieve a "no affect" and/or the proponent wants to pursue a proposal which "may affect" T&E species or their habitat, BLM must initiate formal consultation with the FWS before authorizing or proceeding with the proposal.

To initiate formal consultation, BLM must prepare a Biological Assessment (BA) which contains the information upon which BLM bases its "no affect" or "may affect" determination. If the proposal is not a major construction activity, a separate BA is not required; a similar analysis (such as an environmental assessment) may be adequate for BLM to determine "no affect." The documentation (a formal BA or another analysis document) is forwarded to the FWS and FWS must concur with the findings before the BLM may authorize or proceed with the action. An analysis or BA must be completed before BLM initiates "formal consultation" under the ESA.

Biological Assessment Process

a. BLM must request a list of species which may be in the project area from the FWS, or describe which species BLM will consider in the BA.

b. The FWS must provide a list of species, or respond to BLM's suggested list within 30 days. The list includes any endangered species, threatened species, species proposed for listing, and/or candidate species or their habitats which may be in the area of the project.

c. BLM must begin preparation of the BA within 90 days of receipt of the list (or BLM must verify the adequacy of the list before preparing the BA).

d. BLM must complete the BA within 180 days from receipt of the list unless BLM and FWS mutually agree to an extension. If assessing a public/industry-initiated proposal, BLM must provide the proponent a written estimate of the length of the extension and the reason for extending completion beyond 180 days.

e. BLM must submit the completed BA to the FWS. The FWS has 30 days to provide written concurrence with the adequacy of the BA, or to provide written notice of the inadequacy of the BA.

> If the results of the BA are that the action is not likely to adversely affect T&E species or their habitat and the FWS concurs with this finding, the proposed action may be approved. Consultation under the ESA, and compliance with Section 7 has been accomplished.
>
> OR
>
> If the results of the BA are that the proposal "may affect" T&E species or their habitat, but that the project will have a "beneficial affect," and the FWS concurs that there are no adverse effects, the proposal may be approved. Consultation under the ESA, and compliance with Section 7 has been accomplished.

Proposal Review Requiring Formal Consultation

When the BLM determines through the BA that the proposal "may affect" T&E species or their habitat and the effect will not be beneficial, BLM must initiate formal consultation with the FWS under Section 7 of the ESA.

The FWS must complete a Biological Opinion within 90 days, unless BLM and FWS agree to an extension. If extended, the FWS must provide the proponent a written statement explaining the reason for a longer period, what information is required, and the estimated date of completion. If an extension of more than 60 days is needed, the proponent's consent is required.

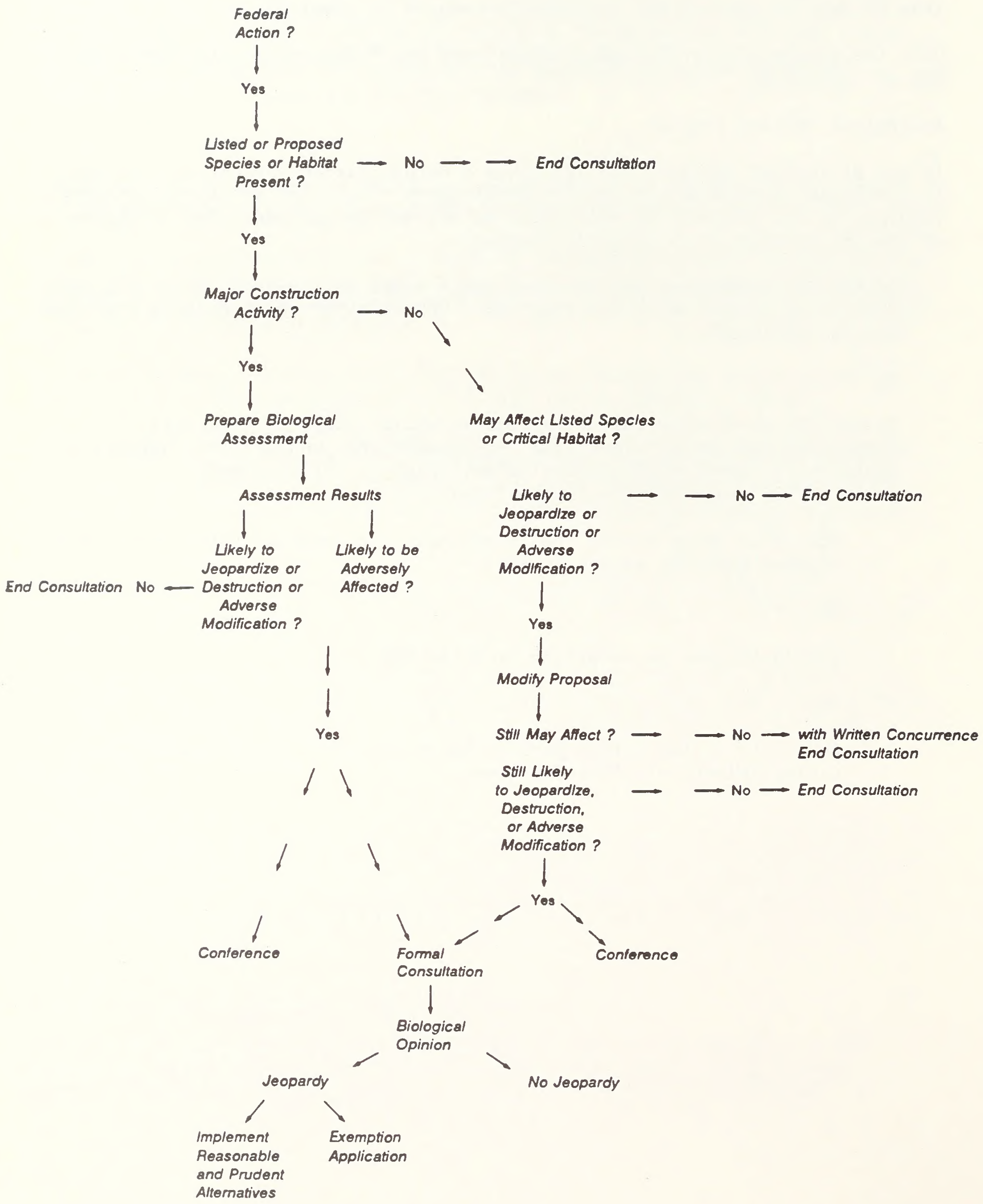
Upon the issuance of a biological opinion by the FWS, consultation under the ESA is concluded.

Biological Opinion Process

In the Biological Opinion, the FWS makes a determination whether the proposal is likely to jeopardize the continued existence of the T&E species (a jeopardy finding) or the proposal is not likely to jeopardize the continued existence of the T&E species (a no jeopardy finding).

> If the FWS determines the proposal would cause no jeopardy, BLM could then approve or proceed with the proposal. Consultation under Section 7 of the ESA is concluded.
>
> OR
>
> If the FWS determines that the proposal would result in a jeopardy situation, the FWS provides some "reasonable and prudent" alternatives to avoid the jeopardy with the biological opinion. At this point consultation under the ESA is completed.
>
> > BLM could adopt one of the "reasonable and prudent" alternatives and proceed with the alternative(s).
> >
> > OR
> >
> > BLM could seek an exemption from the ESA.
> >
> > OR
> >
> > BLM could decide not to pursue the proposal, or could reject/deny a public/industry-initiated proposal.

Section 7 Consultation and Conference


Federal Action ?
Yes
Listed or Proposed Species or Habitat Present ?
No
End Consultation
Yes
Major Construction Activity ?
No
Yes
Prepare Biological Assessment
May Affect Listed Species or Critical Habitat ?
Assessment Results
Likely to Jeopardize or Destruction or Adverse Modification ?
No
End Consultation
Likely to Jeopardize or Destruction or Adverse Modification ?
Likely to be Adversely Affected ?
End Consultation
No
Yes
Yes
Modify Proposal
Still May Affect ?
No
with Written Concurrence End Consultation
Still Likely to Jeopardize, Destruction, or Adverse Modification ?
No
End Consultation
Yes
Conference
Formal Consultation
Conference
Biological Opinion
Jeopardy
No Jeopardy
Implement Reasonable and Prudent Alternatives
Exemption Application

A. Special Category Lands. These lands are:

1. Areas in the California Desert Conservation Area that have been designated as "controlled-use" and "limited-use."
2. Areas designated for potential addition to or which are an actual component of the Wild and Scenic Rivers System.
3. Designated Areas of Critical Environmental Concern (ACEC).
4. Areas designated as part of the National Wilderness Preservation System and administered by BLM.
5. Areas designated as "closed" to off-road vehicle use.

.15 Filing and Contents of Plans of Operations. No special form or format is required for a plan; however, the operator is required to submit the information required by 43 CFR 3809.1-5(c). The authorized officer, to assist the operator in meeting these requirements, should develop a sample plan for use by operators and, when requested, assist operators in developing measures to prevent unnecessary or undue degradation and measures to reclaim disturbed areas. (See .11C)

.16 Plan Approval.

A. Notifications to the Operator. All plans must be promptly reviewed to determine if they are properly filed. (See .71C.) The plan must then be reviewed to determine if hazardous materials requiring another agency's permit are involved. Plans that involve the use of such materials will be treated in the fashion described in .22D. After this review, the authorized officer must acknowledge receipt of a properly filed plan within 5 working days. The acknowledgment must:

1. Advise the operator of the date, not to exceed 30 calendar days after receipt of a properly filed plan, by which BLM must approve the plan, reject the plan, or use additional time to complete the analysis. (See .16D 3-5.)
2. Advise the operator of the name of the team leader who will lead the review.
3. Advise the operator on how to contact the team leader.
4. Advise the operator that additional information may be identified by the review requiring his assistance.
5. Invite the operator to participate fully in the review process.

2. The regulations require an operator to submit a notice at least 15 calendar days prior to commencing operations. If BLM's review is completed in less than 15 days and the authorized officer has determined that no unnecessary or undue degradation will result, the operator may be advised to commence operations without waiting for the entire 15 day period to have passed.

C. Review Actions. The authorized officer is responsible for ensuring that a mining engineer or geologist is involved in the review of the notice, when needed, to determine if proposed operations are unnecessary or undue. Other resource specialists should be involved in the review of the notice. During the review the authorized officer should:

1. Determine land status and check if the proposed operation is on land open to the operations of the mining law. (See .71C.)

2. Determine if the notice describes a disturbance of 5 acres or less per calendar year.

3. Determine that the proposal does not cover substantially the same ground as an operation that has not been reclaimed and is described by a previous notice.

4. Determine if the proposal will make use of hazardous materials and ensure that the operator has the proper State or Federal hazardous materials permits. (See .22D.)

5. Ensure that the operator and the mining claimant(s) are promptly notified of any threatened or endangered species, cultural resources, or fossils that may be affected and subject to the provisions of 43 CFR 3809.2-2(d) or (e)(2).

6. Notify the operator that no unnecessary or undue degradation will result from the described operation, reminding the operator that a final inspection of reclamation is required and that the Bureau will assist the operator in developing appropriate reclamation techniques, if requested.

.14 Plans of Operations - When Required. Plans are required when an operation will disturb more than 5 acres in any calendar year, or for any level of activity exceeding casual use in one of the special category lands. A plan for any activity regardless of the extent of proposed surface disturbance may be required of an operator who has established a record of noncompliance. (Failure to file or failure to comply. See. 32.)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

TAKE PRIDE IN AMERICA

May 30, 1990

IN REPLY REFER TO:
6840 (240)

JUN 4 - 1990

ROUTING	INITIAL / DATE		
SD		MR	
ASO		L&RR	
SASO		OPNS	
EEO		ADMIN	
OPA		OF	
SODA		LEAD RESP.	

Information Bulletin No. 90- 383

To: SD's

From: Director

Subject: Endangered Species Mitigation and Compensation

Attached is a copy of a memo from the California State Director to the Regional Solicitor's Office requesting an opinion on mitigation and compensation relative to mining plans (Attachment 1). Attachment 2 is the reply to that request. We felt that you might find this information useful and revelant to your State.

J. David Almand

J. David Almand
Chief, Division of Wildlife
and Fisheries

2 Attachments

1 - Memo to Solicitor, Pacific Southwest Region, from State Director California (6 pp)
2 - Office of Solicitor Reply (3 pp)

ROUTE	INITIAL	DATE
✓ AREA MGR.		
ADMIN.		
✓ MINERALS		
RANGE		
✓ REALTY		
RES FOREST		
✓ WILDLIFE	[illegible]	6-11
CULTURAL		
CENT FILE		
WEEK FILE		

JUN 8 11 16 AM '90

JAN 4 1990

6840
3809
CA-932.1

Memorandum

To: Solicitor, Pacific Southwest Region

From: State Director

Subject: Request for Opinion on Requiring Endangered Species Mitigation and Compensation as a Condition of Approval of Mining Plans of Operations

BACKGROUND

Endangered Species Act Requirements

Section 7. The conservation of species listed as endangered or threatened pursuant to the Endangered Species Act of 1973 (ESA), as amended, is one of the highest priorities of the Bureau of Land Management and other Federal agencies. Section 7(a)(1) of the ESA states:

> The Secretary [of the Interior] shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act.

For the purposes of this memorandum the above paragraph will be referred to as the "conservation requirement" of the ESA.

In addition to this conservation requirement the ESA requires that all Federal agencies ensure that their actions do not jeopardize the continued existence of a Federally listed endangered or threatened species. This "no-jeopardy requirement," as it will be referred to in this memorandum, is elaborated in Section 7(a)(2):

> Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

Regulations implementing Section 7 consultation requirements have been adopted and are found at 50 CFR Part 402.

Sections 9 and 10. Sections 9 and 10 of the ESA also come into play for endangered and threatened species of wildlife and fish. Section 9(a)(1)(b) prohibits the taking of any such species except as permitted by Section 10 of the ESA. Section 10(a)(1)(b) authorizes the Secretary of the Interior to permit any taking otherwise prohibited by Section 9(a)(1)(b) if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.[1]

As defined in Section 3(19) of the ESA the term "take" means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The regulations at 50 CFR 17.3 further define "harm" as used in the definition of take as an act that kills or injures such species. This may include significant habitat modification or degradation where it kills or injures wildlife by significantly impairing essential breeding patterns, including breeding, feeding, or shelter. A recent ruling by the Ninth Circuit Court (Palila v. Hawaii Department of Natural Resources, No. 87-2188, 9th Cir. 1988) confirmed a district court's finding that habitat degradation that could result in extinction is harm.

Biological opinion. The biological opinion issued by the Fish and Wildlife Service (FWS) in response to a Section 7 consultation includes the opinion of FWS as to whether the proposed action is likely to jeopardize the continued existence of an endangered or threatened species. If, in FWS' opinion, the action is likely to jeopardize such species, the FWS specifies reasonable and prudent measures that may be taken to remove the likelihood of jeopardy. These measures may include mitigation, compensation, or both.

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[1] Although the Endangered Species Act itself prohibits the taking of "endangered" species of wildlife and fish the regulations at 50 CFR 10.12 expand this definition to include threatened species as well.

The biological opinion also includes a statement concerning incidental take. Pursuant to the regulations at 50 CFR 402.14(i) this incidental take statement specifies the extent of incidental take authorized by the biological opinion, specifies reasonable and prudent measures to minimize the impact, and sets forth terms and conditions that must be complied with by the Federal agency or any applicant to implement these reasonable and prudent measures. These terms and conditions may include mitigation, compensation, or both.

Mitigation and Compensation

The recent emergency listing of the desert tortoise as an endangered species (Federal Register 54(149):32326-32331, August 4, 1989) has resulted in several Section 7 consultations between the Bureau and the Fish and Wildlife Service. Many more Section 7 consultations are anticipated. In order to meet both the conservation requirement and no-jeopardy requirements of the ESA, the Bureau has determined that a policy of "no net loss" must be applied to all agency actions as defined in Section 7(a)(2). Two mechanisms at the disposal of the Bureau are used to accomplish this: (1) mitigation of impacts adverse to the desert tortoise and its habitat; and (2) compensation of any adverse impacts that are residual following mitigation.

Mitigation includes those measures taken at the site of an agency action to reduce the amount of adverse impact to the species and its habitat. Examples include such measures as the relocation of an access road away from tortoise habitat or the restriction of project activities to a time period during which tortoises are not active.

Compensation consists of measures taken away from the site of an agency action to compensate for the loss of tortoises and their habitat that occurs following mitigation. Examples include such measures as the purchase of private property on which the tortoise population can be enhanced to offset the loss on the project site or the construction of facilities on publicly owned land that will result in an increase in the tortoise population equal to the number that are lost as a result of the agency action. The compensation may take the form of monetary payments to the Bureau or another agency to be used for this purpose.

The no net loss policy being followed by the Bureau requires that all residual losses to desert tortoises be compensated. The California Desert District has developed a compensation formula for use throughout the range of the desert tortoise in California. This compensation formula is included in the document "Recommendations for Management of the Desert Tortoise in the California Desert," (Attachment 1, pages 43-46). Compensation is also addressed in California's "Interim Guidelines for Management of Desert Tortoise," (Attachment 2, Supplement, page 2).

The Bureau is in the process of developing final mitigation and compensation requirements to be applied to all projects within the habitat of the desert tortoise in California.

Mitigation, Compensation and Mining Plans of Operations

Mitigation and compensation as means of avoiding jeopardy and conserving listed species have been widely used by the Bureau and other agencies. For example, both have been employed effectively in the oilfields of Kern County where their use has allowed oil and gas development to proceed apace without a net loss of habitat for the several Federally listed species that occur there.

There is some question, however, as to whether the Bureau may require endangered species mitigation and compensation as a condition of approval of a mining plan of operations. Mining activities under the 1872 Mining Law are different from other BLM managed activities in that there is a large element of non-discretion involved. The regulations governing the surface management of public lands under U.S. Mining Laws (43 CFR 3802 for those lands under wilderness review and 43 CFR 3809 for all other public lands) require that all mining operations be conducted to prevent unnecessary or undue degradation of the federal lands. For most operations, however, these regulations and the laws on which they are based do not give BLM the authority to deny a plan of operations but, rather, only to change the plan such that the method used to extract and process minerals is the least damaging of those alternatives that are available.

The Endangered Species Act, however, does give the Bureau the authority to deny a mining plan of operations if there is an unavoidable conflict with an endangered species. This interpretation is elaborated in the Supplemental Information preamble to the final 3809 Regulations (Federal Register 45(230): 78905, November 26, 1980):

> Several comments made the point that cultural and endangered species inventories and compliance with laws relating to these matters may be reason to stop or significantly delay a mining operation. Under the final rulemaking, these inventories will be required only when a plan or operations is submitted. Because of the new threshold level that is provided in the final rulemaking, this should cause delay in only a few instances. If there is an unavoidable conflict with an endangered species habitat, a plan could be rejected based not on section 302(b) of the Federal Land Policy and Management Act, but on section 7 of the Endangered Species Act. If, upon compliance with the National Historic Preservation Act, the cultural resources cannot be salvaged or damage to them mitigated, the plan must be approved. Essentially, as the comments suggested, these laws may slow the plan approval process; one law may sop a project while the other may only delay it. (Emphasis added.)

The applicable section in the regulations themselves is 3809.2-2 which states, in part:

> All operations including casual use and operations under either a notice (3809.1-3) or a plan of operations (3809.1-4 of this title), shall be conducted to prevent unnecessary or undue degradation of the Federal lands and shall comply with all pertinent Federal and State laws, including but not limited to the following: ...

> (d) *Fisheries, wildlife and plant habitat.* The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species, and their habitat which may be affected by operations.

Note for the purpose of later discussion that the threshold in the 3809 regulations is not that action must be taken to prevent jeopardy to the species, but, rather, that action must be taken to prevent adverse impacts. This wording is consistent with both the no-jeopardy and conservation requirements of Section 7 of the ESA.

Timing of Mitigation and Compensation Proposals

The Bureau in California has a longstanding policy of determining the mitigation and compensation measures that will be required to prevent and/or offset adverse impacts to endangered and threatened species and their habitats before initiating Section 7 consultation with FWS. These measures then become terms and conditions on any permit or other authorization the Bureau issues following receipt of the FWS biological opinion. Should FWS require additions or modifications to these measures the terms and conditions are changed to incorporate these.

The important thing to note is that BLM does not simply send to FWS a description of the proposed action and wait for FWS to develop all the mitigation and compensation measures. Rather, BLM includes all those mitigation and compensation measures it feels are necessary to meet its conservation and no-jeopardy requirements under the ESA. If a project proponent indicates he will not abide by the terms and conditions that will be imposed, the Bureau will reject his application outright and not initiate Section 7 consultation with FWS (whether this procedure can be followed in the case of mining plans of operations is one of the questions being asked by this memorandum).

There may also be cases in which the mitigation and compensation measures imposed by the Bureau will be sufficient to eliminate any effect on a listed species. If this determination is made (through informal consultation with FWS) no Section 7 consultation would be initiated. The mitigation and compensation measures would simply be made terms and conditions of the permit or other authorization. One of our questions below relates to whether this procedure can be followed in the case of mining plans of operation.

REQUEST FOR OPINION

Based on the above it appears to us that BLM can require mitigation and compensation on mining plans of operation in order to meet its obligations under Section 7 of the ESA. However, inasmuch as we can expect court challenges to some of our actions relative to the desert tortoise, we seek your opinion on this issue. Specifically we request answers to the following questions.

1. May the Bureau impose mitigation and compensation requirements on an operator as a condition of approval of a mining plan of operations before (or, in the case where we

have mitigated and/or compensated to the point that there is no effect, without) requesting a biological opinion from the Fish and Wildlife Service?

2. If the answer to Question 1 is yes, and the operator refuses to implement such mitigation and compensation requirements, may the Bureau reject the mining plan o. operations without initiating Section 7 consultation with FWS?

3. Are the mitigation and compensation requirements required by a FWS biological opinion and implemented by the Bureau binding on the operator?

4. May the Bureau reject a mining plan of operations if the FWS determines, in a biological opinion, the plan will likely jeopardize the continued existence of a Federally listed species and there are no reasonable and prudent alternatives?

5. May the Bureau impose mitigation and compensation requirements on a mining operator beyond those that are specified in a FWS biological opinion if, in the Bureau's opinion, the measures required by FWS are insufficient to meet the Bureau's conservation requirements under the Endangered Species Act?

6. If the Bureau can implement only those measures required in a FWS biological opinion, may the Bureau recommend mitigation and compensation measures to the FWS for inclusion in its biological opinion?

7. If the Bureau requires site-specific biological information (including inventory data) in order to evaluate the impacts of a mining plan of operations on a listed species, may the Bureau require the operator to provide this information (e.g., through contract) or must Bureau personnel gather it? Please answer both for cases in which the Bureau ha determined that an environmental impact statement (EIS) is necessary and for those i which either an EIS is not required or an environmental assessment must first be prepared to determine if an EIS will be needed.

We currently have two mining plans of operations on which we must initiate Section 7 consultation. We anticipate several more soon. An expeditious response would be appreciated. Please contact John Willoughby of my staff (FTS 460-4725) if you need more information.

Attachments
1 - Recommendations for Management of the Desert Tortoise (64 pp.)
2 - IM No. CDD-89-52 and Supplement, Interim Directives for Management of Desert Tortoise (11 pp.)

APPENDIX C

United States Department of the Interior
OFFICE OF THE SOLICITOR
PACIFIC SOUTHWEST REGION
2800 COTTAGE WAY
ROOM E-2753
SACRAMENTO, CALIFORNIA 95825-1890

IN REPLY REFER TO:

BLM.PS.1010

APR 9 1990

MEMORANDUM

TO: Edward L. Hastey, State Director
Bureau of Land Management, Sacramento, CA

FROM: Burton J. Stanley, Office of the Regional Solicitor
Pacific Southwest Region, Sacramento, CA

SUBJECT: Authority of BLM to Require Endangered Species Mitigation and Compensation as a Condition of Approval of Mining Plans of Operations

Your memorandum of January 4, 1990 requests my opinion as to the authority of the Bureau of Land Management to require mitigation and compensation to protect endangered and threatened species and their habitats in order to meet the Bureau's obligations under Section 7 of the Endangered Species Act (ESA), 16 U.S.C. §1536. Specifically, you ask seven questions which I will answer in order.

Question No. 1 - May the Bureau impose mitigation and compensation requirements on an operator as a condition of approval of a mining plan of operations before requesting a biological opinion from the Fish and Wildlife Service (FWS)?

Answer: The provisions of 43 C.F.R. §3809.2-2(d) clearly provide the Bureau of Land Management with the authority to impose mitigation and compensation requirements as a condition of the approval of a mining plan of operations.

Question No. 2 - If the operator refuses to implement such mitigation and compensation requirements, may the Bureau reject the mining plan of operations withoit initiating Section 7 consultation with the FWS?

Answer: The provisions of 43 C.F.R. §3809.1-6 do not provide for the rejection or denial of a mining plan of operations. I am of the opinion that the Bureau may, in appropriate circumstances, notify the operator that mitigation and compensation are required for the approval of a plan of operations. See 43 C.F.R. §3809.1-6(a)(2). You may refuse to approve the plan of operations until such a plan encompasses the mitigation and compensation requirements of the Bureau.

Question No. 3 - Are the mitigation and compensation requirement required by a FWS biological opinion and implemented by the Bureau binding on the operator?

Answer: - The provisions of 43 C.F.R. §3809.3-2 make the BLM's requirements binding on the operator. It makes no difference whether or not the BLM's requirements are imposed on its own motion or as a result of a FWS biological opinion.

Question No. 4 - May the Bureau reject a mining plan of operations if the FWS determines in a biological opinion that the plan will likely jeopardize the continued existence of a federally listed species and there are no reasonable and prudent alternatives?

Answer: I am of the opinion that the Bureau may reject a plan of operations pursuant to the authority contained in 16 U.S.C. §1536(a)(2). That subsection requires that the Secretary ensure that mining is authorized on the public lands in such a manner as to not jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of habitat of such species. See Federal Register 45 (230), p. 78905, November 26,1980.

Question No. 5 - May the Bureau impose mitigation and compensation requirements on a mining operator beyond those that are specified in a FWS biological opinion if, in the Bureau's opinion, the measures required by FWS are insufficient to meet the Bureau's conservation requirements under the Endangered Species Act?

Answer: The provisions of 43 C.F.R. §3809.2-2(d) provide the Bureau with independent regulatory authority to require mitigation and compensation as a condition of approval of a mining plan of operations.

Question No. 6 - If the Bureau can implement only those measures required in a FWS biological opinion, may the Bureau recommend mitigation and compensation measures to the FWS; for inclusion in its biological opinion?

Answer: It is clearly the responsibility of the Bureau to make such recommendations to the FWS in addition to carrying out the Bureau's own mandate.

Question No. 7 - If the Bureau requires site-specific biological information (including inventory data) in order to evaluate the impacts of a mining plan of operations on a listed species, may the Bureau require the operator to provide this information (e.g., through contract) or must Bureau personnel gather it? Please answer both for cases in which the Bureau has determined that an environmental impact statement (EIS) is necessary and for those in which either an EIS is not required or an environmental assessment must first be prepared to determine if an EIS will be needed.

Answer: I am unaware of any authority which the BLM has to require a private party seeking approval of a plan of operations to pay for the studies which BLM may deem necessary to evaluate the plan. BLM may, of course, require the applicant to redefine or redescribe operations proposed to be conducted under the plan to allow BLM to more specifically evaluate the impact of the proposed operations. I would be pleased to consider any theory you may have to impose upon the applicant the costs of evaluating the plan prior to approval.

Burton J. Stanley
Attorney-Adviser

APPENDIX C

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ARIZONA STATE OFFICE

3809 (922)
2993D

July 9, 1990

COPY FOR YOUR INFORMATION

Instruction Memorandum No. AZ-90-180
Expires 09/30/91

To: District Managers

From: State Director

Subject: Procedural Requirements for Processing Notice Level Activities Authorized Under the Mining Law Where Potential Impacts to Threatened or Endangered Species Have Been Identified

Due to a recent case in the Arizona Strip District, issues have been raised as to procedural requirements for processing notice level activities under the mining law where the proposed activities are in areas where threatened or endangered species may be adversely impacted.

The regulations which are contained in 43 CFR 3809.2-2 require that, "All operations . . . under . . . a notice . . . shall be conducted to prevent unnecessary or undue degradation of the Federal lands and shall comply with all pertinent Federal and State laws, including but not limited to . . . : (d) Fisheries, wildlife and plant habitat. The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species, and their habitat which may be affected by operations."

BLM Manual 3809.22(C)(1) is clear on the procedures to follow when potential conflicts with threatened or endangered species are encountered. The Manual states, "If the processing of a notice reveals that a potential conflict with a threatened or endangered species exists, notify the operator and mining claimant of the conflict by telephone and certified mail, return receipt requested. Advise the operator not to proceed and state that a knowing violation of the taking provisions of the Endangered Species Act (ESA) will result in a notice of noncompliance and may result in criminal penalties. If the operator wishes to develop measures that will eliminate the conflict, the authorized officer will arrange for the participation of BLM biologists, geologists, and, if needed, the U.S. Fish and Wildlife Service during the process of developing the measures."

Some other questions raised were:

1. Does a notice under 43 CFR 3809.1-3 constitute a Federal action?

   The processing of a notice does not constitute a Federal action. (Manual Section 3809.13, Sierra Club, et al. v. Michael Penfold, et al., Civil No. A86-083, 1987.)

2. Is Section 7 consultation under the Endangered Species Act and 50 CFR 402 required for notice-level activities?

   Because the processing of a notice is not a Federal action, the provisions of Section 7 of the Endangered Species Act do not apply. However, coordination with the U.S. Fish and Wildlife Service is encouraged if there is any real or perceived conflict with a listed species or its habitat.

   As stated in 50 CFR 402.03, "Section 7 and the requirements of this part apply to all actions in which there is discretionary Federal involvement or control." Because the BLM has no approval authority (43 CFR 3809.1-3(b)) for notice-level activities, proposals made under a notice are nondiscretionary and, therefore, Section 7 of the Endangered Species Act does not apply. The lack of approval authority for notices is further substantiated in *Bruce W. Crawford Et Ux.*, 86 IBLA 350 (1985). At 391, the decision states in part, ". . . what BLM cannot approve, neither can it disapprove."

3. How does the participation of the U.S. Fish and Wildlife Service affect the 15-day time frame for completing the review of notices?

   If coordination is undertaken, both U.S. Fish and Wildlife Service and BLM must be cognizant of the 15-day review period allotted under 43 CFR 3809. The operator must be notified of any conflicts, as described in the BLM 3809 Manual, *within* the 15-day period. However, it must be noted that if an operator begins operations under a notice after being notified that there is a conflict, and advised not to begin, he may be subject to being served with a notice of noncompliance, be enjoined from continuing operations by a court of appropriate jurisdiction, and be held liable for damages for such unlawful acts. Resolution of the conflict may take longer that the 15-day review period. The 15-day time frame does not relieve the operator of the responsibility to meet the requirements of the Endangered Species Act.

Policy: When processing notices, follow the direction contained in BLM Manual 3809.22(C)(1), and request assistance from the U.S. Fish and Wildlife Service as determined necessary to meet the intent and requirements of the Endangered Species Act.

Any questions on this matter may be referred to Byard Kershaw at FTS 261-5550, (602) 640-5550, or to Ted Cordery at FTS 261-5509, (602) 640-5509.

Acting

Distribution
WO-680, Room 3538
WO-240, Room 903, Premier Building

APPENDIX D

LEGAL DESCRIPTIONS OF ROOSTS

All lands are in the Sixth Principal Meridian.

Jackson Canyon ACEC

ALL LANDS

T. 32 N., R 79 W.
- portions of Mineral Survey 527 within secs. 18, 19 and 30;
- sec. 18, lots 4 and 5, SE¼SW¼;
- sec. 19, lots 1, 3, 6-8, 10, 27-40, and 49-62;
- sec. 30, lots 1-4, W½E½, E½W½;
- sec. 31, lots 1 and 2, E½NW¼.

T. 31 N., R. 80 W.
- sec. 2, lots 1-4, SW¼NE¼, S½NW¼, N½SW¼;
- sec. 3, lots 1 and 2.

T. 32 N., R. 80 W.
- sec. 6, lots 12, 13 and 16;
- sec. 7, lots 1-12, and 14-17, W½NE¼, NW¼SE¼;
- sec. 8, lots 3-8, SE¼;
- sec. 9, S½;
- sec. 10, S½S½;
- sec. 13, SW¼NW¼, SW¼, W½SE¼, SE¼SE¼;
- sec. 14, W½NE¼, SE¼NE¼, W½, SE¼;
- sec. 15, all;
- sec. 16, all;
- sec. 17, lots 1-6, NE¼, SW¼, S½SE¼ (all);
- sec. 18, lots 2, 4, 5, 7, 8, 10, and 12-21, SE¼ (all);
- sec. 19, lots 3, 5, 6, 13-18 and 20, NE¼NE¼, SW¼NE¼;
- sec. 20, lots 1-9, NE¼, N½NW¼, SE¼NW¼;
- sec. 21, lots 1-4, N½, N½S½;
- sec. 22, all;
- sec. 23, all;
- sec. 24, all;
- sec. 25, all;
- sec. 26, all;
- sec. 27, lots 1-10 and 14-16;
- sec. 28, N½NE¼;
- sec. 34, lots 1-3, 6-11, and 15, SE¼SE¼;
- sec. 35, all;
- sec. 36, N½, N½SW¼, NW¼SE¼.

T. 32 N., R. 81 W.
- sec. 1, SE¼SE¼;
- sec. 11, S½SE¼;
- sec. 12, E½, SW¼;
- sec. 13, all;
- sec. 14, N½, E½SW¼, SE¼;
- sec. 24, N½NE¼.

Containing 14,081.77 acres in Natrona County, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 32 N., R 79 W.
sec. 31, lot 1.
T. 31 N., R. 80 W.
sec. 2, lots 1-4, S½NW¼, NW¼SW¼.
T. 32 N., R. 80 W.
sec. 6, lot 16;
sec. 7, lots 14-17;
sec. 8, lots 3-8;
sec. 17, lots 1-4;
sec. 18, lots 13-21;
sec. 19, lots 13-18 and 20;
sec. 20, lots 1-9;
sec. 21, lots 1-4;
sec. 22, S½SW¼;
sec. 24, SE¼SE¼;
sec. 25, E½, W½NW¼, SE¼NW¼, SW¼;
sec. 26, E½NE¼, SW¼NE¼, SE¼;
sec. 27, lots 1-10, and 14-16;
sec. 28, N½NE¼;
sec. 34, lots 1-3, 6-11, and 15;
sec. 35, E½.
T. 32 N., R. 81 W.
sec. 13, E½SE¼;
sec. 24, NE¼NE¼.

Containing 3,843.07 acres in Natrona County, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 32 N., R 79 W.
sec. 18, lot 5, SE¼SW¼;
sec. 19, lots 1, 3, 6-8, 10, 27-40, and 49-62;
sec. 30, lots 1-4, SW¼NE¼, E½W½, W½SE¼;
sec. 31, lot 2, SE¼NW¼.
T. 32 N., R. 80 W.
sec. 6, lots 12 and 13;
sec. 7, lots 1, 2 and 5-9, W½NE¼, NW¼SE¼;
sec. 8, SE¼;
sec. 9, S½;
sec. 10, S½S½;
sec. 13, W½SW¼, SE¼SW¼, SE¼SE¼;
sec. 14, W½NE¼, SE¼NE¼, W½, SE¼;
sec. 15, all;
sec. 17, lots 5 and 6, NE¼, SW¼, SW¼SE¼;
sec. 18, lots 5, 7, 8, 10 and 12, SE¼;
sec. 19, lots 3, 5, and 6, SW¼NE¼;
sec. 20, NE¼;
sec. 21, NW¼;
sec. 22, N½, N½SW¼, SE¼;
sec. 23, all;

sec. 24, E½NE¼, SW¼NE¼, W½, N½SE¼;
sec. 26, NW¼NE¼.
T. 32 N., R. 81 W.
sec. 1, SE¼SE¼;
sec. 11, S½SE¼;
sec. 12, SW¼NE¼, SW¼, W½SE¼, SE¼SE¼;
sec. 13, N½, SW¼, W½SE¼;
sec. 14, N½, E½SW¼, SE¼;
sec. 24, NW¼NE¼.

Containing 7,258.35 acres in Natrona County, Wyoming.

Stinking Creek Roost

ALL LANDS

T. 30 N., R. 80 W.
sec. 4, SW¼NW¼, W½SW¼;
sec. 5, lots 1-5, S½N½, SW¼, N½SE¼, SW¼SE¼ (all);
sec. 6, lot 1, SE¼NE¼, SE¼;
sec. 7, lots 7 and 21, E½;
sec. 8, lots 1-4, W½E½, W½ (all);
sec. 9, W½W½.

Containing 2,182.42 acres in Natrona County, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 30 N., R. 80 W.
sec. 5, lots 1 and 5, SE¼NE¼, S½NW¼, SW¼, NE¼SE¼;
sec. 6, E½SE¼;
sec. 7, lot 21;
sec. 8, lots 1-4, N½NW¼, SE¼NW¼;
sec. 9, W½W½.

Containing 941.60 acres in Natrona County, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 30 N., R. 80 W.
sec. 4, SW¼NW¼, W½SW¼;
sec. 6, W½SE¼;
sec. 7, lot 7, E½;
sec. 8, SW¼NW¼, SW¼.

Containing 760.00 acres in Natrona County, Wyoming.

Cole Creek Roost

ALL LANDS

T. 33 N., R. 76 W.
    sec. 6, lots 3 and 4.
T. 34 N., R. 76 W.
    sec. 31, lots 1-4, E½W½.
T. 33 N., R. 77 W.
    sec. 1, lots 1-4.
T. 34 N., R. 77 W.
    sec. 35, E½E½;
    sec. 36, all.

Containing 1,353.61 acres in Converse County, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 34 N., R. 76 W.
    sec. 31, lots 3 and 4, E½SW¼.

Containing 157.37 acres in Converse County, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 34 N., R. 76 W.
    sec. 31, lots 1 and 2, E½NW¼.

Containing 156.59 acres in Converse County, Wyoming.

Boxelder Creek Roost

ALL LANDS

T. 32 N., R. 74 W.
    Tracts 59 and 60;
    sec. 6, lots 12-19, 24, 25 and 28;
    sec. 7, lots 1-16;
    sec. 18, lots 1-12;
    sec. 19, lots 1 and 2, NE¼NW¼.
T. 32 N., R. 75 W.
    Tracts 40 and 60;
    sec. 1, lots 7-10, S½NE¼, SE¼;
    sec. 2, SE¼SE¼;
    sec. 11, E½E½;
    sec. 12, lots 1-15, W½NW¼;
    sec. 13, lots 1-19;
    sec. 14, E½E½;
    sec. 23, lots 1, 2 and 4, NE¼NE¼;
    sec. 24, lots 1 and 5-16.

Containing 4,086.30 acres in Converse County, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 32 N., R. 74 W.
Part of Tract 59;
sec. 6, lots 24, 25 and 28.

Containing 84.13 acres in Converse County, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 32 N., R. 74 W.
sec. 6, lots 12-18;
sec. 7, lots 1-7, and 9-16;
sec. 18, lots 2-4, 7, and 9-12;
sec. 19, NE¼NW¼.
T. 32 N., R. 75 W.
sec. 1, lots 7-10, SE¼SW¼;
sec. 11, E½SE¼;
sec. 12, lots 1-15, W½NW¼;
sec. 13, lots 1-19;
sec. 14, E½E½;
sec. 23, lot 1, NE¼NE¼;
sec. 24, lots 1, 5-8, and 11-15.

Containing 2,941.18 acres in Converse County, Wyoming.

Little Deer Creek Roost

ALL LANDS

T. 32 N., R. 76 W.
part of tracts 49, 54, and 66;
tracts 50G, 50H, 51A-51S, 65G, 65M, 78A, 78H, 78I, 78P;
sec. 2, lots 5 and 6;
sec. 10, lots 1-4, S½S½;
sec. 11, lots 1 and 2, E½, S½SW¼;
sec. 12, W½W½;
sec. 14, N½NE¼, SW¼NE¼, NW¼;
sec. 15, lots 1, 4, and 6, NE¼, E½NW¼;

Containing 2,719.36 acres in Converse County, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 32 N., R. 76 W.
sec. 2, lots 5 and 6;
sec. 11, N½NE¼;
sec. 15, lot 6.

Containing 145.67 acres in Converse County, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 32 N., R. 76 W.
sec. 10, lots 1-4, S½S½;
sec. 11, lots 1 and 2, S½NE¼, S½SW¼, SE¼;
sec. 12, W½W½;
sec. 14, N½NE¼, SW¼NE¼, NW¼;
sec. 15, lots 1 and 4, NE¼, E½NW¼.

Containing 1,396.69 acres in Converse County, Wyoming.

Pine Mountain West Roost

ALL LANDS

T. 34 N., R. 84 W.
sec. 2, lots 3 and 4, S½NW¼, W½SW¼;
sec. 3, lots 1-4, S½N½, S½ (all);
sec. 4, lots 1-4, S½N½, S½ (all);
sec. 5, lot 1;
sec. 9, N½NE¼, NE¼NW¼;
sec. 10, NW¼NW¼.
T. 35 N., R. 84 W.
sec. 26, SW¼SW¼;
sec. 27, S½;
sec. 28, S½;
sec. 32, E½E½;
sec. 33, all;
sec. 34, all;
sec. 35, W½NW¼, SE¼NW¼, SW¼.

Containing 4,110.29 acres in Natrona County, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 34 N., R. 84 W.
sec. 2, lots 3 and 4;
sec. 3, SE¼NE¼, S½;
sec. 4, lots 2-4, SW¼NE¼, S½NW¼, SW¼, W½SE¼, SE¼SE¼;
sec. 5, lot 1;
sec. 9, N½NE¼, NE¼NW¼;
sec. 10, NW¼NW¼.
T. 35 N., R. 84 W.
sec. 27, SW¼, N½SE¼, SW¼SE¼;
sec. 28, E½SE¼;
sec. 32, E½E½;
sec. 33, E½NE¼, SW¼NE¼, SW¼NW¼, S½;
sec. 34, W½NE¼, SE¼NE¼, N½NW¼, NW¼SE¼;
sec. 35, NW¼NW¼.

Containing 2,434.20 acres in Natrona County, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 34 N., R. 84 W.
    sec. 2, S½NW¼, W½SW¼;
    sec. 3, lots 1-4, SW¼NE¼, S½NW¼;
    sec. 4, lot 1, SE¼NE¼, NE¼SE¼.
T. 35 N., R. 84 W.
    sec. 26, SW¼SW¼;
    sec. 27, SE¼SE¼;
    sec. 28, N½SW¼, NW¼SE¼;
    sec. 33, NW¼NE¼, N½NW¼, SE¼NW¼;
    sec. 34, NE¼NE¼, S½NW¼, SW¼, E½SE¼;
    sec. 35, S½NW¼, SW¼.

Containing 1,516.09 acres in Natrona County, Wyoming.

Pine Mountain East Roost

ALL LANDS

T. 35 N., R. 83 W.
    sec. 18, lots 1-4, E½, E½W½ (all);
    sec. 19, lots 1-4, E½, E½W½ (all);
    sec. 20, SW¼NW¼, NW¼SW¼;
    sec. 30, lots 1-3, N½NE¼, E½NW¼.
T. 35 N., R. 84 W.
    sec. 13, all;
    sec. 14, E½E½;
    sec. 23, E½E½;
    sec. 24, all;
    sec. 25, N½, SE¼.

Containing 3,673.20 acres in Natrona County, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 35 N., R. 83 W.
    sec. 19, lots 3 and 4;
    sec. 30, lots 1-3, SE¼NW¼.
T. 35 N., R. 84 W.
    sec. 13, S½SW¼;
    sec. 14, E½E½;
    sec. 23, SE¼NE¼;
    sec. 24, N½, E½SW¼, SE¼;
    sec. 25, E½, E½NW¼.

Containing 1,299.95 acres in Natrona County, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 35 N., R. 83 W.
    sec. 18, lots 1-4, E½, E½W½ (all);
    sec. 19, lots 1-4, E½, E½W½ (all);
    sec. 20, SW¼NW¼, NW¼SW¼;
    sec. 30, lots 1-3, N½NE¼, E½NW¼.

T. 35 N., R. 84 W.
sec. 13, all;
sec. 14, E½E½;
sec. 23, E½E½;
sec. 24, all;
sec. 25, N½, SE¼.

Containing 1,942.35 acres in Natrona County, Wyoming.

Big Sulfur Springs Roost

ALL LANDS

T. 38 N., R. 83 W.
sec. 5, lots 1-4, SW¼NE¼, S½NW¼;
sec. 6, lots 1-6, S½NE¼, SE¼NW¼.
T. 39 N., R. 83 W.
sec. 29, SW¼, W½SE¼, SE¼SE¼;
sec. 30, S½SE¼;
sec. 31, lots 1-4, E½, E½W½ (all);
sec. 32, all;
sec. 33, W½W½.
T. 38 N., R. 84 W.
sec. 1, lots 1-4, S½N½, N½S½.
T. 39 N., R. 84 W.
sec. 25, SE¼SW¼;
sec. 36, all.

Containing 3,580.32 acres in Natrona County, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 38 N., R. 83 W.
sec. 5, lots 2-4, SW¼NE¼, S½NW¼;
sec. 6, lots 1-6, S½NE¼, SE¼NW¼.
T. 39 N., R. 83 W.
sec. 29, SW¼, W½SE¼, SE¼SE¼;
sec. 30, S½SE¼;
sec. 32, all;
sec. 33, W½W½.
T. 38 N., R. 84 W.
sec. 1, lots 1-3, S½NE¼, SE¼NW¼, NE¼SW¼, NW¼SE¼.

Containing 2,111.73 acres in Natrona County, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 38 N., R. 83 W.
sec. 5, lot 1.
T. 39 N., R. 83 W.
sec. 31, lots 1-4, E½, E½W½ (all).
T. 38 N., R. 84 W.
sec. 1, lot 4, SE¼NE¼, NE¼SE¼.

T. 39 N., R. 84 W.
    sec. 25, SE¼SW¼.

Containing 828.59 acres in Natrona County, Wyoming.

Pine Ridge Roost

ALL LANDS

T. 39 N., R. 77 W.
    sec. 2, lot 4, SW¼NW¼, SW¼, S½SE¼;
    sec. 3, lots 1-4, S½NE¼, S½SE¼;
    sec. 10, NE¼, N½SE¼, SE¼SE¼;
    sec. 11, all;
    sec. 12, W½W½;
    sec. 14, N½N½;
    sec. 15, NE¼NE¼.
T. 40 N., R. 77 W.
    sec. 27, W½NE¼, W½, SE¼;
    sec. 28, E½;
    sec. 33, NE¼, NE¼SE¼;
    sec. 34, all;
    sec. 35, W½NW¼, SE¼NW¼, SW¼.

Containing 3,920.63 acres in Natrona and Converse Counties, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 39 N., R. 77 W.
    sec. 2, lot 4, SW¼NW¼, SW¼, SW¼SE¼;
    sec. 3, lots 1-4, S½NE¼, S½SE¼;
    sec. 10, NE¼;
    sec. 11, NE¼SE¼;
    sec. 12, W½W½;
    sec. 14, N½N½.

Containing 960.63 acres in Natrona and Converse Counties, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 39 N., R. 77 W.
    sec. 2, SE¼SE¼;
    sec. 10, N½SE¼, SE¼SE¼;
    sec. 11, N½, SW¼, W½SE¼, SE¼SE¼;
    sec. 12, W½W½;
    sec. 15, NE¼NE¼.
T. 40 N., R. 77 W.
    sec. 27, W½NE¼, W½, SE¼;
    sec. 28, NE¼, N½SE¼, SE¼SE¼;
    sec. 33, E½NE¼, NE¼SE¼;
    sec. 34, all;
    sec. 35, W½NW¼, SE¼NW¼, SW¼.

Containing 2,840.00 acres in Natrona and Converse Counties, Wyoming.

North Fork Cheyenne River Roost

ALL LANDS

T. 37 N., R. 75 W.
sec. 7, lots 5-20;
sec. 18, lots 5-19, NE¼NE¼.
T. 37 N., R. 76 W.
sec. 12, all;
sec. 13, all.

Containing 2,534.27 acres in Natrona and Converse Counties, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 37 N., R. 75 W.
sec. 7, lots 11, 12, and 14-19;
sec. 18, lots 5-13.
T. 37 N., R. 76 W.
sec. 12, S½;
sec. 13, N½, NW¼SW¼.

Containing 1,347.00 acres in Natrona and Converse Counties, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 37 N., R. 75 W.
sec. 7, lots 5-10, 13, and 20;
sec. 18, lots 14-19.
T. 37 N., R. 76 W.
sec. 12, N½;
sec. 13, E½SW¼, SW¼SW¼, SE¼.

Containing 1,147.27 acres in Natrona and Converse Counties, Wyoming

Miller Hills Roost

ALL LANDS

T. 39 N.,R. 67 W.
sec. 7, lots 3, 4, E½SW¼, S½SE¼;
sec. 8, SW¼, SW¼SE¼;
sec. 17, W½E½, W½;
sec. 18, lots 1-4, E½, E½W½ (all);
sec. 19, lots 1-3, N½NE¼, SW¼NE¼, E½NW¼, NE¼SW¼;
sec. 20, NW¼NE¼, N½NW¼.
T. 39 N., R. 68 W.
sec. 12, S½SE¼;
sec. 13, E½, SE¼NW¼, SW¼;
sec. 14, SE¼SE¼;
sec. 23, E½E½;
sec. 24, all.

Containing 3,494.11 acres in Natrona and Converse Counties, Wyoming.

FEDERAL SURFACE AND MINERAL ESTATE

T. 39 N.,R. 67 W.
sec. 7, lots 3 and 4, E½SW¼, S½SE¼;
sec. 8, SW¼, SW¼SE¼;
sec. 17, W½NE¼, E½NW¼;
sec. 19, lots 1-3, E½NW¼, NE¼SW¼.
T. 39 N., R. 68 W.
sec. 13, N½NE¼, SW¼NE¼, SE¼NW¼, E½SW¼, W½SE¼;
sec. 24, N½.

Containing 1,465.79 acres in Natrona and Converse Counties, Wyoming.

FEDERAL MINERAL ESTATE UNDER NONFEDERAL SURFACE ESTATE

T. 39 N.,R. 67 W.
sec. 17, W½NW¼, SW¼, NW¼SE¼;
sec. 18, lots 1-4, E½, E½W½ (all);
sec. 19, N½NE¼, SW¼NE¼;
sec. 20, NW¼NE¼, NE¼NW¼.
T. 39 N., R. 68 W.
sec. 12, S½SE¼;
sec. 13, SE¼NE¼, W½SW¼, E½SE¼;
sec. 14, SE¼SE¼;
sec. 23, E½E½;
sec. 24, S½.

Containing 1,948.32 acres in Natrona and Converse Counties, Wyoming.

APPENDIX E

SURFACE AND MINERAL OWNERSHIP OF ROOSTS

Jackson Canyon Roost[a]	Acreage	Percentage
Federal Surface and Minerals	3,843.07	(27.3%)
Federal Minerals under NonFederal Surface	7,258.35	(51.5%)
Nonfederal Surface and Minerals	2,980.35	(21.2%)
Total Federal Minerals	11,101.42	(78.8%)
Total Roost Acres	14,081.77	

Stinking Creek Roost		
Federal Surface and Minerals	941.60	(43.1%)
Federal Minerals under NonFederal Surface	760.00	(34.8%)
Nonfederal Surface and Minerals	480.82	(22.0%)
Total Federal Minerals	1,701.60	(78.0%)
Total Roost Acres	2,182.42	

Cole Creek Roost		
Federal Surface and Minerals	157.37	(11.6%)
Federal Minerals under NonFederal Surface	156.59	(11.6%)
Nonfederal Surface and Minerals	1,039.65	(76.8%)
Total Federal Minerals	313.96	(23.2%)
Total Roost Acres	1,353.61	

Boxelder Creek Roost		
Federal Surface and Minerals	84.13	(2.1%)
Federal Minerals under NonFederal Surface	2,941.18	(72.0%)
Nonfederal Surface and Minerals	1,060.99	(26.0%)
Total Federal Minerals	3,025.31	(74.0%)
Total Roost Acres	4,086.30	

Little Deer Creek Roost		
Federal Surface and Minerals	145.67	(5.4%)
Federal Minerals under NonFederal Surface	1,396.69	(51.4%)
Nonfederal Surface and Minerals	1,177.00	(43.3%)
Total Federal Minerals	1,542.36	(56.7%)
Total Roost Acres	2,719.36	

Pine Mountain West Roost

Federal Surface and Minerals	2,434.20	(59.2%)
Federal Minerals under NonFederal Surface	1,516.09	(36.9%)
Nonfederal Surface and Minerals	160.00	(3.9%)
Total Federal Minerals	3,950.29	(96.1%)
Total Roost Acres	4,110.29	

Pine Mountain East Roost

Federal Surface and Minerals	1,299.95	(35.4%)
Federal Minerals under NonFederal Surface	1,942.35	(52.9%)
Nonfederal Surface and Minerals	430.90	(11.7%)
Total Federal Minerals	3,242.30	(88.3%)
Total Roost Acres	3,673.20	

Big Sulfur Springs Roost

Federal Surface and Minerals	2,111.73	(59.0%)
Federal Minerals under NonFederal Surface	828.59	(23.1%)
Nonfederal Surface and Minerals	640.00	(17.9%)
Total Federal Minerals	2,940.32	(82.1%)
Total Roost Acres	3,580.32	

North Fork Cheyenne River Roost

Federal Surface and Minerals	1,347.00	(53.2%)
Federal Minerals under NonFederal Surface	1,147.27	(45.3%)
Nonfederal Surface and Minerals	40.00	(1.6%)
Total Federal Minerals	2,494.27	(98.4%)
Total Roost Acres	2,534.27	

Pine Ridge Roost

Federal Surface and Minerals	960.63	(24.5%)
Federal Minerals under NonFederal Surface	2,840.00	(72.4%)
Nonfederal Surface and Minerals	120.00	(3.1%)
Total Federal Minerals	3,800.63	(96.9%)
Total Roost Acres	3,920.63	

Miller Hills Roost

Federal Surface and Minerals	1,465.79	(42.0%)
Federal Minerals under NonFederal Surface	1,948.32	(55.8%)
Nonfederal Surface and Minerals	80.00	(2.3%)
Total Federal Minerals	3,414.11	(97.7%)
Total Roost Acres	3,494.11	

Cumulative Totals

Federal Surface and Minerals	14,791.14	(32.3%)
Federal Minerals under NonFederal Surface	22,735.43	(49.7%)
Nonfederal Surface and Minerals	8,209.71	(18.0%)
Total Federal Minerals	37,526.57	(82.0%)
Total Roost Acres	45,736.28	

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[a] This roost acreage is based on alliquot parts, and not on a computation of approximate acreage within a boundary that does not follow legal subdivisions.

APPENDIX F

AUTHORIZED PUBLIC LAND USES WITHIN ROOST AREAS

Note:

All public land is under grazing lease, and all is leased or subject to oil and gas lease by competitive or simultaneous lease.

BALD EAGLE ROOSTS

Jackson Canyon

R&PP patent for Archery Range
R&PP lease WYW53522 (Casper College)
R&PP patent for Calvary Baptist Church
R&PP patent for Wyoming Girl Scout Council
pipeline right-of-way WYC039592
road right-of-way WYW87528 (BLM)
road right-of-way WYW87433 (BLM)
highway right-of-way WYW099479
range improvement fence 1246
range improvement fence 1794
range improvement 1233
range improvement 1796
range improvement 1795
oil and gas lease WYW74579
oil and gas lease WYW87457
oil and gas lease WYW74580
oil and gas lease WYW100718

Stinking Creek

WYW100498 highway right-of-way (State 487)
WYW101869 powerline right-of-way
WYW118899 fence (BLM)
no oil and gas leases present; parts are on the Dec 1989 list

Cole Creek

railroad right-of-way WYC042128
railroad right-of-way WYW0121887 (this line has been abandoned)
pipeline right-of-way WYW036123
road right-of-way WYW81567
road right-of-way WYC063114
telephone right-of-way WYW47871
telephone right-of-way WYW71157
all township in withdrawal coal classification
oil and gas lease WYW0324721
oil and gas lease WYW96940
oil and gas lease WYW103294
oil and gas lease WYW103896
oil and gas lease WYW103294
oil and gas lease WYW108599
oil and gas lease WYW112624
oil and gas lease WYW113818
oil and gas lease WYW104589

Boxelder Creek

railroad right-of-way WYW0294440
oil and gas lease WYW105950
oil and gas lease WYW120712

Little Deer Creek

no other authorized uses
no oil and gas leases

Pine Mountain West

powerline right-of-way WYW0316714
powerline right-of-way WYW77982
powerline right-of-way WYW81484
pipeline right-of-way WYC040473
coal classification
oil and gas lease WYW019621
oil and gas lease WYW0220510
oil and gas lease WYW37328
oil and gas lease WYW41244
oil and gas lease WYW72133
oil and gas lease WYW80711
oil and gas lease WYW80712
oil and gas lease WYW84812
oil and gas lease WYW102502
oil and gas lease WYW102503
oil and gas lease WYW106007
oil and gas lease WYW112419
oil and gas lease WYW112420
oil and gas lease WYW113261
oil and gas lease WYW113839
oil and gas lease WYW114728
oil and gas lease WYW115447
oil and gas lease WYW115448
oil and gas lease WYW122271

Pine Mountain East

no rights-of-way
oil and gas lease WYW84289
oil and gas lease WYW114728
oil and gas lease WYW120739
oil and gas lease WYW120743

Big Sulfur Springs

no rights-of-way
oil and gas lease WYW95850
oil and gas lease WYW114310
oil and gas lease WYW115974
oil and gas lease WYW117745
oil and gas lease WYW118803
oil and gas lease WYW121758

North Fork Cheyenne River

no rights-of-way
oil and gas lease WYW36195
oil and gas lease WYW72065
oil and gas lease WYW80574
oil and gas lease WYW82916
oil and gas lease WYW83565
oil and gas lease WYW84805
oil and gas lease WYW87358
oil and gas lease WYW91194
oil and gas lease WYW91198
oil and gas lease WYW91199
oil and gas lease WYW98861
oil and gas lease WYW100659
oil and gas lease WYW105285
oil and gas lease WYW108199
oil and gas lease WYW112367
oil and gas lease WYW112962
oil and gas lease WYW114295
oil and gas lease WYW114604
oil and gas lease WYW117162
oil and gas lease WYW120463
oil and gas lease WYW123239

Pine Ridge

pipeline right-of-way WYW56161
oil and gas lease WYW108994
oil and gas lease WYW111798
oil and gas lease WYW114506
oil and gas lease WYW116120
oil and gas lease WYW120477
oil and gas lease WYW120478

Miller Hills

no rights-of-way
oil and gas lease WYW76340
oil and gas lease WYW106786
oil and gas lease WYW107709
oil and gas lease WYW111025
oil and gas lease WYW114385
oil and gas lease WYW115394
oil and gas lease WYW116098
oil and gas lease WYW116098
oil and gas lease WYW116604
oil and gas lease WYW117329
oil and gas lease WYW121234

BALD EAGLE NESTS

Careyhurst Nest

railroad right-of-way WYC042128
railroad right-of-way WYW0121887

pipeline right-of-way WYC034054
ditch right-of-way WYW0294364
oil and gas lease WYW94823
oil and gas lease WYW111087 (on railroad R/W WYC042128)

Rawhide Nest

county road right-of-way WYW86191
powerline right-of-way WYW88640
canal right-of-way WYW64392
free use permit WYW90048
range improvement fence no. 1312
oil and gas lease WYW80409
oil and gas lease WYW91266
oil and gas lease WYW113786
oil and gas lease WYW120903

BALD EAGLE FEEDING HABITAT AREAS

Pete's Draw

powerline right-of-way WYW29045
telephone right-of-way WYW79241
road right-of-way WYW18148
range improvement fence no. 903
range improvement fence no. 1007
common use (moss rock) area WYW90033 covers the entire township

Ledge Creek

common use (moss rock) area WYW90033 covers the entire township

Government Bridge

telephone right-of-way WYW0210672
telephone right-of-way WYW48215
highway right-of-way WYW0175689
oil and gas lease WYW80681

Bolton Creek

telephone right-of-way WYW57174
range improvement fence no. 45
oil and gas lease WYW108206
oil and gas lease WYW120027
common use (moss rock) area WYW90033 covers the entire township

Clarkson Hill

powerline right-of-way WYC063605
powerline right-of-way WYC073624
powerline right-of-way WYW034244
oil and gas lease WYW78137
oil and gas lease WYW85607
oil and gas lease WYW92435
oil and gas lease WYW115440
common use (moss rock) area WYW90033 covers the entire township

Gray Cliff

powerline right-of-way WYC063605
powerline right-of-way WYC073624
powerline right-of-way WYW034244
range improvement fence no. 915
oil and gas lease WYW99116

Bessemer Mountain

telephone right-of-way WYW0210672
range improvement fence no. 1907

Bessemer Bend

none

Emigrant Gap

powerline right-of-way WYC063605
powerline right-of-way WYC073624
powerline right-of-way WYW034244
powerline right-of-way WYW18636
pipeline right-of-way WYC039592
oil and gas lease WYW97003

Big Muddy

road right-of-way WYW81567
pipeline right-of-way WYW038123
railroad right-of-way WYC042128
oil and gas lease WYW103294
oil and gas lease WYW108599
oil and gas lease WYW112624

Parkerton

railroad right-of-way WYC042128
oil and gas lease WYC072335

Welch

ditch right-of-way WYW0294364
telephone right-of-way WYC034054

Gedney Draw

oil and gas lease WYW99913

LaBonte

ditch right-of-way WYW0294366
oil and gas lease WYW105244

APPENDIX G

LANDOWNERS AND PUBLIC LAND GRAZING LESSEES WITH ALLOTMENT NUMBERS

Jackson Canyon ACEC

Eagle Ridge Ranch Co.
c/o Oliver Scott
5120 Alcova RT No. 16
Casper, WY 82604
Grazing Lease No. 496560
Allotment No. 10142

James Popple & Robert Creager
Box 306
Casper, WY 82602
Grazing Lease No. 496498
Allotment No. 10408

Cheney Livestock Corp.
c/o Bob Cheney
5845 Bates Creek RT
Casper, WY 82604
Grazing Lease No. 496100
Allotment No. 10017

Walt Merschat
732 South Grant
Casper, WY 82601

Chris H. Christensen
Box 51 Casper Mountain RT
Casper, WY 82601

Nola J. Collom
504 South Pennsylvania
Casper, WY 82604

Robert G. Day
217 North 6th Avenue
Casper, WY 82604

Wyoming Girl Scout Council
120 West 1st
Casper, WY 82601

William H. Curry III
3205 Bella Vista DR
Casper, WY 82601

Bayard Rea
5200 Yessness Lane
Casper, WY 82604

Mills Livestock Company
6165 Raderville RT
Casper, WY 82604
Grazing Lease No. 496422

Robert R. Rose Jr.
P.O. Box 1006
Cheyenne, WY 82001

Bernadine Agnes Reed
1014 South David
Casper, WY 82601
Thomas Lee Elfering
82 Marigold
Casper, WY 82601

David Olson
Rural RT 1, Box 91
Halfway, OR 97834

R.L. Launspach
P.O. Box 188
Evansville, WY 82636

First Christian Church
520 CY Avenue
Casper, WY 82601

Ronald R. Lund
11265 Goose Egg Road Alcova RT
Casper, WY 82604

Ralph Costello
3350 Carmel Drive
Casper, WY 82604

Nature Conservancy
Box 450
Lander, WY 82520

Thomas J. Clayton
3625 West Garden Cr. Road
Casper, WY 82601

Dawn Cheryl Defreece
16 Riverbend Road
Casper, WY 82604

William R. Young
7771 South Bello Camino Alcova RT
Casper, WY 82604

John K. Garman
10477 Goose Egg Road Alcova RT
Casper, WY 82604

Robert Mullen
P.O. Box 2915
Casper, WY 82602

Diane Werner
P.O. Box 4404
Casper, WY 82604

Frank Litaker
3914 Bethpage Road
Kannapolis, NC 28081

Hogadon Estates

Natrona County
200 North Center
Casper, WY 82601

See Ben Realty
150 North Center
Suite 1
Casper, WY 82601

William Dryer
3000 W Riverbend Road
Casper, WY 82604

James P. Dinsmore
4115 East 8th
Casper, WY 82609

Robert Forrister
3515 Terry Ridge Road
Fort Collins, CO 80524

William C. Burris
11115 Goose Egg Road Alcova RT
Casper, WY 82604

Susan Cole
246 S Washington
Casper, WY 82601

Edward J. Randall
5108 Alcova RT Box 12
Casper, WY 82604

H. Eugene Fowler
10497 W Goose Egg Road
Alcova RT 82604

Jack Shultz
P.O. Box 1405
Mills, WY 82644

Calvary Babtist Church
1800 South Conwell
Casper, WY 82601

Stinking Creek Roost

Garrett Ranch Company
Box 5846 Bates Creek RT
Casper, WY 82644
Grazing Lease No. 496213
Allotment No. 10032

Schnoor Land and Livestock
Box 5815
Casper, WY 82604
Grazing Lease No. 496558
Allotment No. 00140

Cole Creek Roost

B.B. Brooks Company
c/o H.E. Stuckenhoff
Box 1050
Casper, WY 82602
Grazing Lease No. 496058
Allotment No. 10082

Boner Brothers Partnership
c/o Bob Boner
Box 66
Glenrock, WY 82637
Grazing Lease No. 496047
Allotment No. 10005

John E. Pierce
P.O. Box 3173
Casper, WY 82602
Non Lessee

Cole Creek Sheep Company
c/o Jon Nicolaysen
(See Parkerton Ranch Company)

Glen Q. Burris
29423 Pebble Beach Drive
Sun City, CA 92381
Non Lessee

First National Bank of Kansas City
(See John G. Arnold)
Non Lessee

Larry Byer
14700 Evansville Road, Box 2
Evansville, WY 82636
Non Lessee

Parkerton Ranch Company
c/o Jon Nicolaysen
140 North Center
Casper, WY 82601
Grazing Lease No. 496638
Allotment No. 10152

Robert Keenan
Box 366
Glenrock, WY 82637
Grazing Lease No. 496342
Allotment No. 10082

Eleanor O'Brien
2721 Saratoga Road
Casper, WY 82604
Non Lessee

Jack McDaniels
14700 Evansville RT
Box 1
Evansville, WY 82636
Non Lessee

John G. Arnold
P.O. Box 419038
Kansas City, MO 64183
Non Lessee

Badger Et. Al.
(See John E. Pierce)
Non Lessee

Boxelder Creek Roost

J. R. Bixby
P.O. Box 38
Glenrock, WY 82637
Grazing Lease No. 496036
Allotment No. 00176

Green Valley, Inc.
c/o William E. Barbe
71 Barber Road, RT 1
Douglas, WY 82633
Grazing Lease No. 496230
Allotment No. 00274

Duncan Ranches, Inc.
c/o Hugh Duncan
Boxelder RT
Glenrock, WY 82637
Grazing Lease No. 496175
Allotment No. 00239

Basil C. Bradbury
P.O. Box 1900
Glenrock, WY 82637
Non Lessee

True Ranches
c/o David True
P.O. Drawer 2360
Casper, WY 82602
Grazing Lease No. 496506
Allotment No. 10164

Faye Hale
976 Box Elder Road
Glenrock, WY 82637
Non Lessee

Nancy Bixby Hudson
926 Hobson
Lander, WY 82520

Converse County Park

Ed Heiser
P.O. Box 342
Glenrock, WY 82637
Non Lessee

Little Deer Creek Roost

True Ranches
(See Above)

Pine Mountain West Roost

Wesley Childers
Strohecker Ranch Company
6220 Raderville RT
Casper, WY 82604
Grazing Lease No. 496609
Allotment No. 10065

Clarice Manning
Box 85
Natrona, WY 82646
Grazing Lease No. 496521
Allotment No. 10124

Evelyn Cummings
2111 Trojan Drive
Casper, WY 82601
Grazing Lease No. 496423
Allotment No. 10028

Pine Mountain Ranch
c/o C. Putman
P.O. Box 2020
Mills, WY 82644
Grazing Lease No. 496493
Allotment No. 10134

TCM Inc.
c/o J.B. Eccles Jr.
Box 2147
Casper, WY 82602
Grazing Lease No. 496181
Allotment No. 20523

Pine Mountain East Roost

Clarice Manning
(See Above)

Pine Mountain
(See Above)

Big Sulfur Springs Roost

Howard Farms
c/o Bud Howard
P.O. Box 825
Casper, WY 82602
Grazing Lease No. 496184
Allotment No. 10033

Coffman Ranch Co.
c/o Lee Coffman
908 South Durbin St.
Casper, WY 82601
(Coffman owns the lands Morel
Livestock Inc. leases)

Morel Livestock Inc.
119 Harvard Drive
Gillette, WY 82716
Grazing Lease No. 496286
Allotment No. 10024

North Fork Cheyenne River Roost

William Henry
1320 Nottingham Drive
Casper, WY 82609
Grazing Lease No. 496269
Allotment No. 10108

Peabody Coal Company
301 North Memorial Drive
St. Louis, Missouri 63102
(Lands leased by Patterson Ranch)

Patterson Ranch
c/o Joe Patterson
2421 Ross Route
Douglas, WY 82633
Grazing Lease No. 496709
Allotment No. 00497

Pine Ridge Roost

Edward Moore
Douglas, WY 82633
Grazing Lease No. 496437
Allotment No. 00369

Frank Shepperson
Box 189
Midwest, WY 82643
Grazing Lease No. 496014
Allotment No. 00115

Staple Three Sheep Company
c/o Buck Allemand
Box 388
Midwest, WY 82643
Grazing Lease No. 496597
Allotment No. 10149

Metropolitan Farm & Ranch
Properties, Inc.
c/o Farmers National Company
Box 80105
Billings, MT 59108
(Metropolitan owns the lands
Frank Shepperson leases)

Miller Hills Roost

Nachtman Land and Livestock, Inc.
c/o Lona Nachtman
2556 Dull Center Road
Douglas, WY 82633

55 Ranch
c/o Rhea Tillard
Box 58
Douglas, WY 82633

APPENDIX H

FEDERAL OIL & GAS LEASE HOLDERS IN ROOSTS

Lease Holder	Oil & Gas Lease Number
Jackson Canyon ACEC	
General Atlantic Resource 410 17th Street, No. 1400 Denver, CO 80202	WYW74579, WYW87457, WYW74580
Prairie Petroleum of Colorado 910 16th Street, No. 610 Denver, CO 80202	WYW100718
Stinking Creek Roost	
none	
Cole Creek Roost	
J. A. Brohman Box 215 Chetek, WI 54728	WYW103294
Robert E. Becker Box 341 Seahurst, WA 98062	WYW103896 (100.00000%)
Equitable Resource Energy Company Box 21017 Billings, MT 59104	WYW103896 (0.00000%)
Melvin Wolf Box 2062 Denver, CO 80201	WYW112624
Byron W. Hughes 101 Spencer Cove Clinton, MS 39056	WYW108599
Marathon Oil Company Box 2069 Houston, TX 77252	WYW0324721 (20.85900%)
Pacific Enterprises Oil Company 1700 Pacific Avenue, No. 1200 Dallas, TX 75201-4697	WYW0324721 (48.67100%)
Manning Oil Partners 370 17th Street, No. 3650 Denver, Co 80202	WYW0324721 (30.47000%)

Cole Creek Roost (Continued)

William E. Jeffers, Jr. Box 123 Artesia, NM 88210	WYW96940
B&P Investments Box 1718 Fort Worth, TX 76101	WYW113818 (50.00000%)
Carnoustie JNT VNTR Box 1718 Fort Worth, TX 76101	WYW113818 (50.00000%)
Amer Equity Partners Box 344 Greensbord, GA 30642	WYW104589

Boxelder Creek Roost

Hixon Development Company Box 2810 Farmington, NM 87499	WYW120712
Elzalene J. Sullivan Box 1001 Ft. Lauderdale, FL 33302	WYW105950

Little Deer Creek Roost

none

Pine Mountain West Roost

Wayne K. Weaver 156 Valley Drive Casper, WY 82601	WYW019621 (33.33000%) WYW0220510 (33.33000%) WYW41244 (0.00000%)
Hawks Company Ltd. Partnership Box 2493 Casper, WY 82602	WYW019621 (66.67000%) WYW0220510 (66.67000%)
Viable Resources Inc. Box 3192 Casper, WY 82602	WYW019621 (0.00000%) WYW0220510 (0.00000%)
Marathon Oil Company Box 3128 Houston, TX 77253	WYW019621 (0.00000%) WYW0220510 (0.00000%) WYW41244 (50.00000%)
Marathon Oil Company Box 3128 Houston, TX 77253	WYW41244 & WYW80712 (50.00000%) WYW72133 (50.00000%) WYW80711 (0.00000%)

Pine Mountain West Roost (Continued)

Amerada Hess Corporation 1200 Milam Entex Houston, TX 77002-5681	WYW72133 (50.00000%) WYW80711 (100.00000%) WYW80712 (50.00000%)
Sophie Kaminski 22 Archung Road Wayne, NJ 07470	WYW84812
Prenalta Corporation Box 2514 Casper, WY 82602	WYW102502 (50.00000%)
Spelpren Company Box 2514 Casper, WY 82602	WYW102502 (50.00000%)
Louis A. Walstrom, Jr. Box 3120 Seal Beach, CA 90740-2120	WYW102503
Marsland B. Moncrief 9th and Commerce Fort Worth, TX 76102	WYW106007
WGR Incorporated 10701 Melody Drive, No. 609 Denver, CO 80234-4123	WYW112419, WYW112420
B&P Investments Box 1718 Fort Worth, TX 76101	WYW113261 (50.00000%)
ABO Petroleum Corporation 105 S. 4th Street Artesia, NM 88210	WYW113839 (33.33000%) WYW114728 (33.33333%)
Myco Industries Inc. 105 S. 4th Street Artesia, NM 88210	WYW113839 (33.33000%) WYW114728 (33.33333%)
Yates Drilling Company 105 S. 4th Street Artesia, NM 88210	WYW113839 (33.34000%) WYW114728 (33.33334%)
Erving Wolf 1001 Fannin, No. 2000 Houston, TX 77002-6709	WYW115447, WYW120739,
Joyce Wolf 1001 Fannin, No. 2000 Houston, TX 77002-6709	WYW115448

Pine Mountain West Roost (Continued)

Mathew Wolf 1001 Fannin, No. 2000 Houston, TX 77002-6709	WYW122271 (50.00000%)
Jane E. Chorney 555 17th Street, No. 1000 Denver, CO 80202	WYW122271 (50.00000%)

Pine Mountain East

Erving Wolf 1001 Fannin, No. 2000 Houston, TX 77002-6709	WYW120739, WYW120743
ABO Petroleum Corporation 105 S. 4th Street Artesia, NM 88210	WYW114728 (33.33333%)
Myco Industries Inc. 105 S. 4th Street Artesia, NM 88210	WYW114728 (33.33333%)
Yates Drilling Company 105 S. 4th Street Artesia, NM 88210	WYW114728 (33.33334%)
Chester L. Pringle Box 848 Marble Falls, TX 78654	WYW84289

Big Sulfur Springs Roost

Santa Fe Energy Company 1 W. 3rd Street, No. 500 Tulsa, OK 74103-3508	WYW95850
Cabot Exploration Corporation Box 4544 Houston, TX 77210-4544	WYW115974, WYW117745
High Plains Energy Company 1600 Broadway, No. 1565 Denver, CO 80202	WYW114310
Joyce L. Carlson Box 702 Cheyenne, WY 82003	WYW121758
Raymond Chorney 555 17th Street, No. 1000 Denver, CO 80202	WYW118803 (50.00000%)

North Fork Cheyenne River Roost

Sun Operating Ltd. Partnership Box 2880 Dallas, TX 75221	WYW114604, WYW112962
Phillips Petroleum Company Box 1967 Houston, TX 77251-1967	WYW112367, WYW120463, WYW36195 (0.00000%)
John P. Ellbogen Box 1928 Casper, WY 82602	WYW83565 (8.75000%), WYW98861 (8.75000%) WYW82916 (8.75000%), WYW100659 (8.75000%) WYW91198 (8.75000%)
Apache Corporation 1700 Lincoln, No. 1900 Denver, CO 80203-4519	WYW83565 (17.50000%), WYW98861 (17.50000%) WYW82916 (17.50000%), WYW100659 (17.50000%) WYW91198 (17.50000%)
Tyrex Oil Company Box 2459 Casper, WY 82602	WYW83565 (8.75000%), WYW98861 (8.75000%) WYW82916 (8.75000%), WYW100659 (8.75000%) WYW91198 (8.75000%)
Phillips Petroleum Company 8055 E. Tufts Avenue Parkway Denver, CO 80237-2898	WYW83565 (0.00000%), WYW108199 (50.00000%) WYW82916 (0.00000%), WYW91194 (47.50000 WYW114295 (100.00000%)
Phillips Petroleum Company Box 1867 Houston, TX 77251	WYW117162
APC Operating Partnership, LP 1700 Lincoln, No. 1900 Denver, CO 80203-4519	WYW82916 (0.00000%)
Phillips Petroleum Company 152 N. Durbin Casper, WY 82601	WYW114295 (0.00000%)
Lancaster Corporation Box 8439 Denver, CO 80201-8439	WYW105285 (25.00000%) WYW117329 (50.00000%)
Maxus Exploration Company 717 N. Harwood Street Dallas, TX 75201	WYW105285 (25.00000%) WYW36195 (25.00000%)
Anderman/Smith and Company 1776 Lincoln, No. 500 Denver, CO 80203	WYW105285 (25.00000%)
ANR Production Company Box 749 Denver, CO 80201	WYW108199 (50.00000%) WYW91194 (47.50000%)
Dalport Oil Corporation 1401 Elm Street, No. 3471 Dallas, TX 75202	WYW123239

North Fork Cheyenne River Roost (Continued)

Enron Oil and Gas Company 1801 California, No. 3400 Denver, CO 80202	WYW72065 (100.00000%)
Joan Chorney 555 17th Street, No. 1000 Denver, CO 80202-3910	WYW36195 (25.00000%)
Argent Energy Inc. 3817 NW Expressway, No. 700 Oklahoma City, OK 73112	WYW36195 (12.50000%)
Arthur M. Guida 410 17th Street, No. 880 Denver, CO 80202	WYW36195 (0.00000%)
Mobile Oil Corporation 1225 17th Street P. O. Box 5444 Denver, CO 80217	WYW36195 (0.00000%)
Aztec G&O Corporation 333 N. Rancho Road Las Vegas, NV 89106	WYW36195 (0.00000%)
Texaco Producing Incorporated Box 2100 Denver, CO 80201	WYW36195 (25.00000%)
Amoco Western Company Box 800 Denver, CO 80201	WYW36195 (0.00000%)
Charles Sherwood 405 Park Drive, No. 2D Great Falls, MT 59401	WYW36195 (0.00000%)
Jirst Ltd. Partnership Box 769 Douglas, WY 82633	WYW36195 (0.00000%)
Samedan Oil Corporation 1660 Lincoln, No. 3000 Denver, CO 80264	WYW36195 (0.00000%)
Amoco Production Company 1660 Lincoln, No. 3000 Denver, CO 80264	WYW36195 (0.00000%)
Kerr-McGee Corporation Box 25861 Oklahoma City, OK 73125	WYW36195 (0.00000%)

North Fork Cheyenne River Roost (Continued)

Sonat Exploration Company 3817 NW Expressway, No. 700 Oklahoma City, OK 73112	WYW36195 (0.00000%) WYW87358 (25.00000%)
Northwestern Mutual 720 E. Wisconsin Ave. Milwaukee, WI 53202	WYW84805 (10.52632%) WYW91199 (10.52632%)
Conquest Exploration 700 Louisiana, Suite 2100 Houston, TX 77002-2728	WYW84805 (18.94737%) WYW91199 (18.94737%) WYW84805 (5.15708%) WYW80574 (5.15708%) WYW91199 (5.15708%) WYW84805 (62.10308%) WYW80574 (62.10308%) WYW91199 (62.10308%) WYW84805 (3.26615%) WYW80574 (3.26615%) WYW91199 (3.26615%)
Madison Resource Inc. 885 2nd Avenue New York, NY 10017	WYW80574 (18.94737%)
Robert E. Johnson 9 Clinton Ct. S. Palm Coast, FL 32037	WYW91194 (5.00000%)
Double Oil and Gas Inc. 55 Broad Street, 7th Floor New York, NY 10004	WYW91194 (0.00000%)
Presidio Exploration Inc. 5613 DTC Parkway, No. 750 Englewood, CO 80111-3035	WYW87358 (25.00000%)

Pine Ridge Roost

Unit Petroleum Company Box 702500 Tulsa, OK 74170	WYW114506 (25.00000%)
John C. Oxley 1 W. 3rd Street, No. 1300 Tulsa, OK 74103	WYW114506 (25.00000%)
Dyco Petroleum Corporation 7130 S. Lewis, No. 300 Tulsa, OK 74134	WYW114506 (50.00000%)
Maurice W. Brown 614 S. Greeley Highway Cheyenne, WY 82007-1855	WYW120477, WYW120478, WYW112962, WYW115394

Pine Ridge Roost (Continued)

Louisiana Land and Exploration 1560 Broadway, No. 1200 Denver, CO 80202	WYW111798 (33.34000%) WYW108994 (33.34000%)
Woods Petroleum Corporation 3817 NW Expressway, No. 700 Oklahoma City, OK 73112	WYW111798 (33.33000%) WYW108994 (33.33000%)
W. A. Moncrief, Jr. 9th At Commerce Ft. Worth, TX 76102	WYW108994 (33.33000%)
Gary Luning 44 Iverness Drive ED Englewood, CO 80112	WYW116420

Miller Hills Roost

ABO Petroleum Corporation 105 S. 4th Street Artesia, NM 8821	WYW116098 (33.33333%)
Myco Industries Inc. 105 S. 4th Street Artesia, NM 88210	WYW116098 (33.33333%)
Yates Drilling Company 105 S. 4th Street Artesia, NM 88210	WYW116098 (33.33334%)
Club Oil and Gas Ltd. 600 17th Street, No. 2300 Denver, CO 80202	WYW121234, WYW114385
William S. Wilkerson Box 157 Hickory Grove, SC 29717	WYW111025
Rutter Enterprises Box 3186 Midland, TX 79702	WYW107709
Anadarko Petroleum Company Box 1330 Houston, TX 77251	WYW76340
Estelle H. Yates 104 S. 4th Street Artesia, NM 88210	WYW106786
Prenalta Corporation Box 2514 Casper, WY 82602	WYW116604 (50.00000%)

Miller Hills Roost (Continued)

Spelpren Company Box 2514 Casper, WY 82602	WYW116604 (50.00000%)
Maurice W. Brown 614 S. Greeley Highway Cheyenne, WY 82007-1855	WYW115394
Joyce Wolf 1001 Fannin, No. 2000 Houston, TX 77002-6709	WYW117329 (50.00000%)
Lancaster Corporation Box 8439 Denver, CO 80201-8439	WYW117329 (50.00000%)

APPENDIX I

SOIL UNITS FOUND IN ROOSTS AND NESTS

MAP UNIT	SOIL SERIES
Jackson Canyon Acec	
115	Bachus-Clayburn association, undulating
126	Blazon-Worfman loams, 6-30 percent slopes
144	Castner-Chincap-Rock outcrop complex, 6-40 percent slopes
154	Chittum-Sneffels loams, 5-40 percent slopes
182	Fiveoh-Thermopolis association, rolling and hilly
192	Grimestone-Grimestone Variant loams, 4-35 percent slopes
205	Irson-Kezar-Rock outcrop complex, 6-40 percent slopes
206	Irson-Sebud complex, 40-65 percent slopes
225	Nunnston loam, 2-15 percent slopes
243	Redsun-Rock outcrop complex, 15-30 percent slopes
247	Rencot-Blazon complex, 15-40 percent slopes
250	Rencot-Thromopolis-Rock outcrop association, sloping and steep
256	Rock outcrop-Ustic Torriorthents, shallow-Rubble land complex, 30-100 percent slopes
264	Roughlock loam, 0-6 percent slopes
284	Threetop-Sunup-Frontier complex, 3-20 percent slopes
Stinking Creek Roost	
113	Arvada, overflow-Slickspots complex, 0-3 percent slopes
194	Haverdad-Clarkelen complex, 0-3 percent slopes
215	Lolite, dry-Rock complex, 5-50 percent slopes
234	Petrie clay loam, dry, 0-3 percent slopes
283	Theedle-Shingle-Kishona complex, 6-40 percent slopes
311	Zigweid-Theedle loams, 3-15 percent slopes
Cole Creek Roost	
Soil mapping has not been done.	
Boxelder Creek and Little Deer Creek Roosts	
Soil mapping has not been done.	
Pine Mountain West Roost	
110	Aquic Ustifluevents, saline, 0-3 percent slopes
112	Arvada-Absted-Slickspots complex, 0-6 percent slopes
169	Decross-Woosley association, sloping, 2-15 percent slopes
201	Hiland sandy loam, 0-6 percent slopes
209	Keyner-Absted-Slickspots complex, 0-6 percent slopes
282	Terro-Vonalee association, rolling, 3-15 percent slopes

Pine Mountain East Roost

112	Arvada-Absted-Slickspots complex, 0-6 percent slopes
129	Boettcher-Pinelli-Worfman loams, 3-15 percent slopes
209	Keyner-Absted-Slickspots complex, 0-6 percent slopes
224	Neldore-Moyerson-Rock outcrop complex, 10-30 percent slopes
227	Orella-Cadoma-Petrie clay loams, 3-30 percent slopes
236	Petrie-Arvada complex, 0-6 percent slopes
301	Vonalee-Hiland complex, 3-15 percent slopes

Big Sulfur Spring Roost

117	Badland, moderately steep to very steep barren land
171	Delplain-Rock outcrop complex, 3-30 percent slopes
216	Lonebear clay loam, 3-12 percent slopes
220	Middlewood-Kather clay loams, 6-30 percent slopes
224	Neldore-Moyerson-Rock outcrop complex, 10-30 percent slopes
256	Rock outcrop-Ustic Torriorthents, shallow-Rubble land complex, 30-100 percent slopes
284	Threetop-Sunup-Frontier complex, 3-20 percent slopes

North Fork Cheyenne River Roost

107	Clarkelen-Drabnab complex, 0-3 percent slopes
131	Shingle-Rock outcrop-Samday complex, 10-30 percent slopes
149	Work-Shingle-Tassel complex, 3-30 percent slopes

Pine Ridge Roost

189	Gateridge-Taluce Variant association, steep, 10-45 percent slopes
274	Shingle-Samday complex, 3-45 percent slopes
283	Theedle-Shingle-Kishona complex, 6-40 percent slopes gullied
305	Worf-Bowbac fine sandy loams, 4-12 percent slopes
307	Worf Variant-Cushman Variant-Peyton association, rolling

Miller Hills Roost

131	Shingle-Rock outcrop-Samday complex, 10-30 percent slopes
148	Wiubaux-Rock outcrop-Shingle complex, 6-45 percent slopes

Careyhurst Nest

Soil mapping has not been done.

Rawhide Nest

BfA	Bankard loamy fine sand, 0-3 percent slopes
BfB	Bankard loamy fine sand, 3-6 percent slopes
BoA	Bayard and Otero fine sandy loams, 0-3 percent slopes
Mu	Mixed alluvial land
Gu	Gullied Land
Otb	Otero fine sandy loam, 3-6 percent slopes

APPENDIX J

MINERAL MATERIAL INFORMATION

THE STATE OF WYOMING

Ed Herschler, Governor
Leno Menghini, Superintendent and Chief Engineer

Wyoming State Highway Department

P. O. BOX 1708 CHEYENNE, WYOMING 82002-9019

January 28, 1986

M E M O R A N D U M

TO: Merwin Moore, P.E., District Engineer, Casper

FROM: M. D. Lubrecht, Engineering Geologist

SUBJECT: Preliminary Geologic Investigation - Freeland Quarry

PROJECT: PREB-024-2(8), Casper-Medicine Bow, Natrona County

INTRODUCTION

A preliminary field investigation was made for quarryable limestone within the Freeland quadrangle in December, 1985 and from Jan. 13-16, 1986. The purpose of the investigation was to locate a source of limestone aggregate which could be used for proposed highway department projects in the vicinity, thus avoiding an excessive haul from the currently-used Sullivan quarry, forty miles to the south. Field mapping and limited outcrop sampling were performed in order to determine if further investigation of the area by drilling is warranted. Photographs of typical exposures were also taken, and may be found in the Appendix.

The study area is located in sections 27, 28 and 34, T. 32 N., R.80 W. (Fig. 1). It is accessible from the old Casper-Medicine Bow Highway, an all-weather, gravel-surfaced road. Presently, access from the highway is by an undeveloped four-wheel-drive trail which crosses the Crescent Ranch. The area is 2.35 miles from the highway, in the Little Red Creek drainage.

Topographically, the area appears as a structurally controlled dip slope or cuesta, an inclined planar surface dipping to the southwest at an angle of approximately eleven degrees. The surface is truncated at its northeastern (topographically higher) boundary by cliffs, and merges with the valley floor at its lower boundary. The dip slope's surface consists of a resistant limestone, and is relatively uneroded, with only one major drainage and a few incipient drainages (all consequent, intermittent streams) developed upon it.

The above landform also extends to the south, locally dissected into smaller, isolated cuestas by Big and Little Red Creeks and other minor streams. The cuestas diminish in height and length, and eventually the feature disappears in Sec. 11, T.31 N., R.80 W.

The slope supports a moderate growth of juniper (Juniperus communis), and various grasses. Most of the land is Federally-owned, administered by the Bureau of Land Management. A forty acre tract within the investigated area is state-owned, the SE 1/4 SE 1/4 Sec. 34, T.32 N., R.80 W. The entire study area is currently used as grazing land by private parties.

Mapping of the area was accomplished on foot (and skis, were necessary), along the traverse lines indicated on Figure 2. Outcrop samples were also taken and submitted to the W.H.D. Central Laboratory for wear grading analysis and mineral purity determinations. Sampling locations, as well as the locations of the attached photographs, are also shown on Figure 2.

REGIONAL STRATIGRAPHY

The limestone exposed at this location is the Alcova limestone member of the Chugwater Group. The group is Triassic in age.

The Chugwater Group is considered to be a transitional marine-to-continental, near-shore deposit. It is composed, in ascending order, of the Red Peak member, a red siltstone and shale, the Alcova limestone, to be described more fully later in this memorandum, the Popo Agie member, a laterally discontinuous red sandstone-to-conglomerate, thought to be of terrestrial origin, (Fig. 3). Within the area studied, the Alcova limestone conformably overlies the Red Peak member, and is conformably overlain by the Popo Agie member; it is generally believed that the Jelm does not occur within the area of Alcova deposition. Higher in the section, the Chugwater Group is overlain by the Sundance and Morrison Formations of Jurassic age, and the LaKota sandstone of Cretaceous age.

ALCOVA LIMESTONE

STRATIGRAPHY OF THE ALCOVA LIMESTONE

The Alcova limestone, where investigated, can be divided into three distinct units. The lower section is composed of medium-bedded (six inches to one foot thick), very fine to coarsely crystalline limestone. Interbeds are sparse within the unit. In outcrop, the rock is moderately hard to very hard, generally requiring several blows with a large hammer to break a hand specimen. The unit appears to be in gradational contact with the underlying, calcareous sandy silt- to silty sandstones of the Red Peak member. The overall thickness of this unit is two to four feet. This unit corresponds to "A" on Fig. 3, and in the photographs in the Appendix.

Conformably overlying the medium-bedded section is a fossiliferous zone ("B" on Fig. 3) composed of stromatolites or "algal mats"; in outcrop the unit appears as a crenulated, laminated to thinly-bedded unit. The laminations are highly contorted, and weather out in relief due to differential erosion between fine clastic, calcareous interbeds and crystalline limestone. Contorted bedding, commonly described as "crinkly", is pervasive, and is due to a combination of the environment of deposition (thought to be near-shore algal mats), post-depositional, soft-sediment slumping, and regional tectonic activity. The stromatolitic horizon is two to four feet thick, and is moderately hard to very hard.

The topmost unit ("C" on Fig. 3) of the Alcova limestone is a very thin- to thin- bedded unit composed of reddish, crystalline limestone, calcareous and silicious red sand and silt interbeds, and limestone intraclasts. The lower section of the unit is frequently composed of flattened, well-rounded, fine gravel- to cobble- sized limestone intraclasts (rip-ups?) set in a matrix of finer, silicious sediment. The basal contact with the fossiliferous unit is frequently scoured or channeled, indicative of deposition in moderate to high energy environment. Higher in the section are numerous ripple cross-laminations, indicating upper delta plain or littoral deposition. This zone is characterized by one-half to one inch thick limestone beds, interbedded with calcareous-cemented, very fine sandstone or siltstone beds of similar thickness. This unit of the Alcova section varies from eight to ten feet in thickness; the rock typically is moderately well weathered in outcrop, and generally breaks easily with few hammer blows.

The entire sequence of medium-bedded limestone, overlain by shallow-water algal mats, in turn overlain by beach-type sediments, provides evidence for a regressive depositional environment.

The above-described section is consistent over the entire area investigated, with only minor irregularities in thickness or lithology. The entire section is from thirteen to twenty feet thick; one isolated section was measured with a thickness of only four to five feet, but its lateral extent was only a few yards.

Boulders of well-rounded, well-indurated conglomerate, ranging to several feet in diameter, are scattered on top of the dip slope formed by the resistant Alcova limestone. These may be remanents of the basal LaKota Formation which have been lowered downsection to rest unconformably on the Alcova as intervening strata of the Sundance Formation were eroded.

ENGINEERING APPLICATIONS

The Alcova limestone is of primary interest for use as a surfacing aggregate for future highway construction in the region. In order to be considered as a source for quarry rock, the material must meet the necessary specifications as an aggregate, as well as other criteria to be discussed below.

Aggregate Quality:

Preliminary tests indicate that the limestone will meet specifications as a surfacing aggregate. "B" wear gradings of 19% to 29.1% were obtained on surface samples collected at the locations shown on Fig. 2. Production of fines did not appear to be excessive during crushing of the samples to 3/4" (less than 9% passed the #200 seive). Previous experience with the Alcova Limestone at the Sullivan Quarry, along with limited sampling and testing at the Freeland site indicate that reject from quarrying operations will be within acceptable limits.

Mineral Quality:

The limestone is currently being evaluated by the W.H.D. Central Laboratory for its quality and value as a source of calcium carbonate. This information will be available at a later date.

Limestone Quantity:

Estimated quantities of quarryable limestone are as follows:

State owned:	
1. SE 1/4 SE 1/4 Sec 34	500,000 CU. YD.
Federally owned:	
2. N 1/2 SE 1/4 Sec 34	900,000 CU. YD.
SUBTOTAL (State and Federal)	
(SE 1/4 Sec 34)	1,400,000 CU. YD.
Federally owned:	
3. NE 1/4 Sec 34	1,600,000 CU. YD.
NW 1/2 Sec 34	830,000 CU. YD.

SUBTOTAL (Federal - Sec 34)...	2,430,000 CU. YD.
SUBTOTAL (Federal & State - Sec. 34)	3,830,000 CU. YD.
Federally owned:	
4. Sec 27	4,900,000 CU. YD.
TOTAL ALL AREAS	8,730,000 CU. YD.

These quantities are based on an approximate thickness of fifteen feet. They are for solid, in-place bedrock and do not take into consideration swell factors or rejected material from quarrying operations.

RECOMMENDATIONS

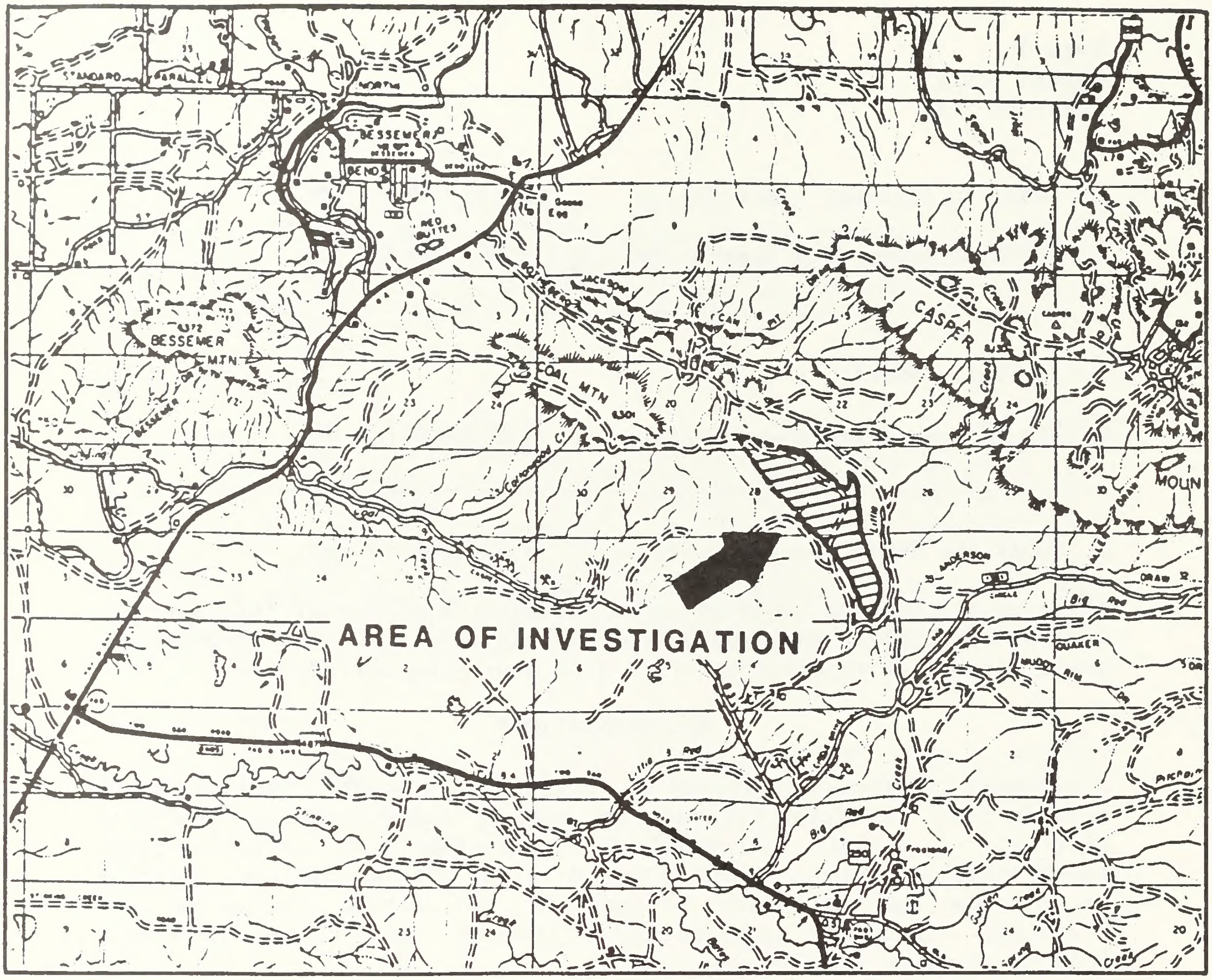
Additional investigation should be done at the proposed Freeland quarry site in order to better estimate the quality and quantity of available material. Aerial photography, construction of suitably-scaled topographic map, and core and rotary drilling are recommended, in order to provide the necessary information for future evaluation and planning. If quarry development is planned, construction of a haul road to the site will be required.

Reviewed By: ______________________
Engr. Geologist IV

Approved By: ______________________
P. E., Chief Engr. Geol.

CC: M. Mullen, Hwy. Const. Contract Supv., Casper
→ Jack Steuerwald, Bureau of Land Management
Geology (3)

Encl. Figures 1-3
Photos No. 1-5



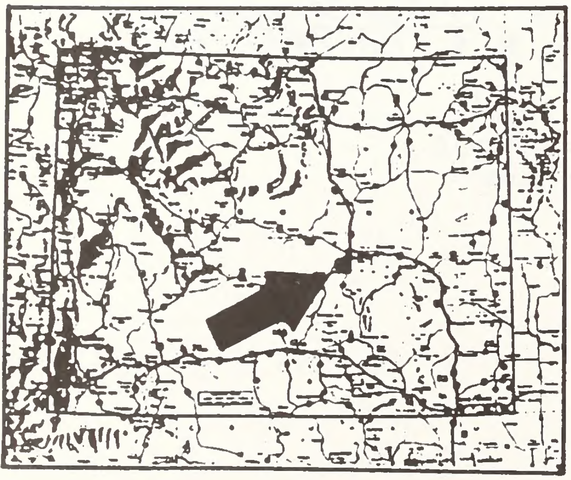

GENERAL LOCATION MAP

Fig. 1 Location Map

Proposed Freeland Quarry

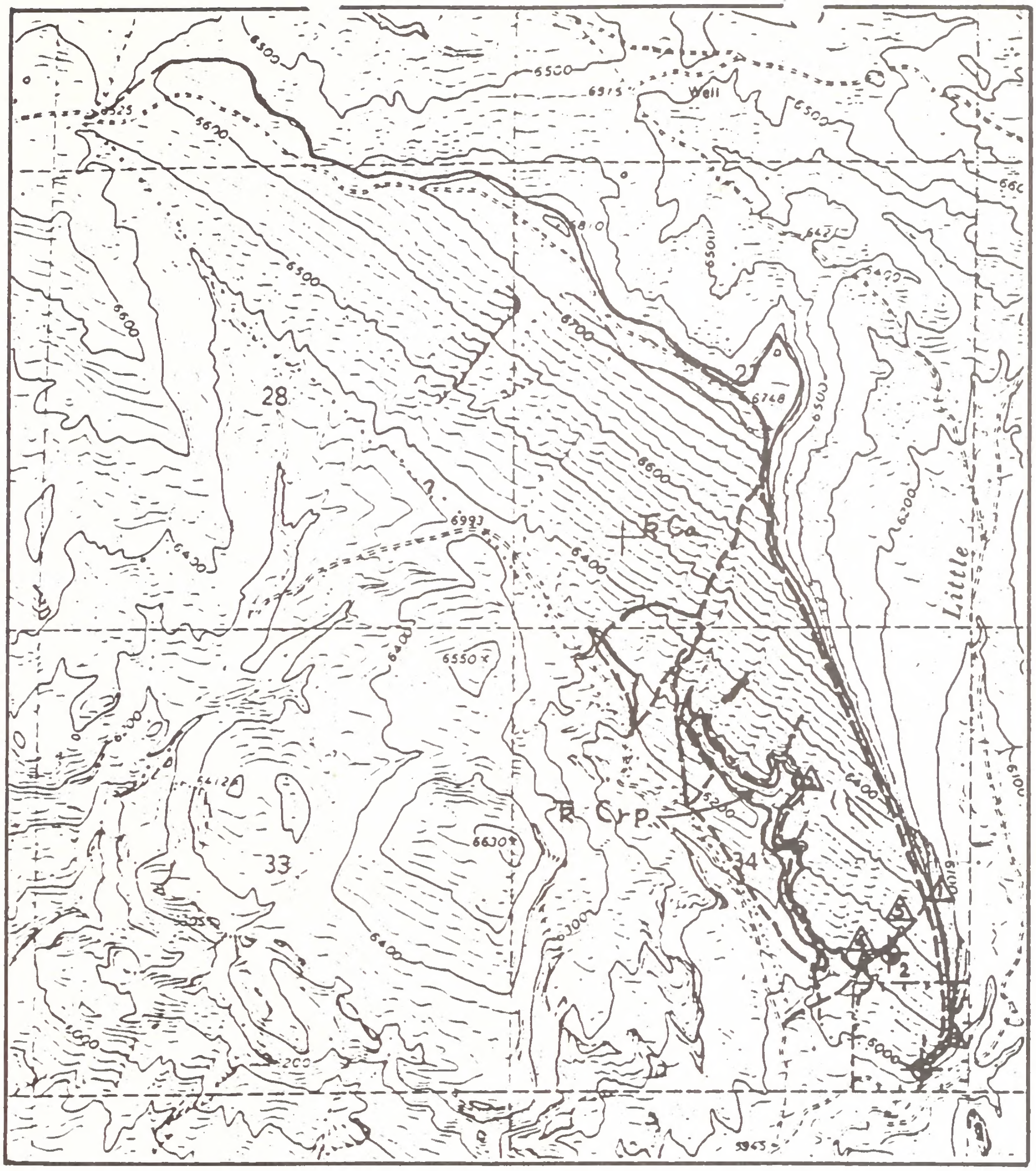


Fig. 2 Preliminary Geological Map

Alcova Limestone member - Chugwater Formation

SAMPLE LOCATIONS ⊕

CONTACT - dotted where concealed

STATE LAND

△ PHOTO LOCATIONS

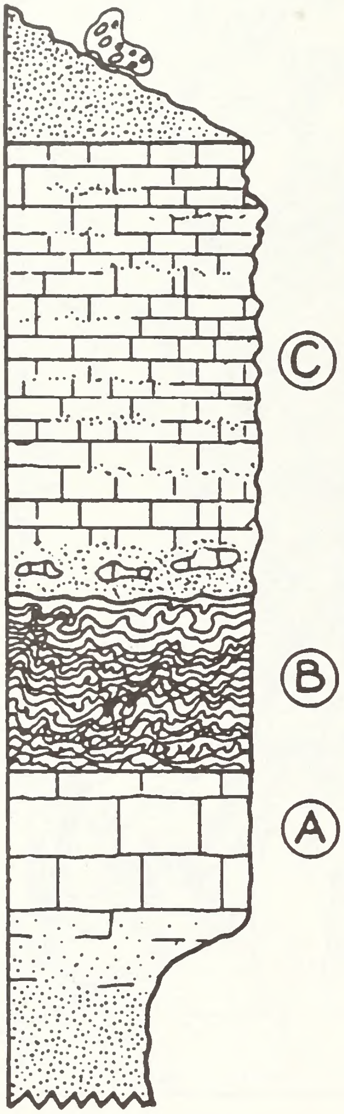
FIELD TRAVERSES

FEDERAL LAND

Chugwater Formation

TRCa - alcova limestone

TRCrp - red peak member



Popo Agie member -
reddish, fine-to-medium silty sandstone, eroded from dipslope. Lakota (?) Fm. conglomerate boulders on surface. Thickness not measured

Alcova Limestone member -
Reddish, crystalline limestone with fine siliceous and calcareous sandstone interbeds. Ripple cross-laminated in upper part, limestone Intraclasts (rip-ups?) in sandy matrix in lower part. Scoured contact at base.

Thickness - 8-10 feet.

Crennulated, "crinkly", fossiliferous (Stromatolitic) limestone. Thinly-bedded-to laminated. Conformable at base.
Thickness - 2-4 feet.

Medium-bedded, very fine-to-coarsely crystalline limestone. Gradational contact at base

Thickness - 2-4 feet.

Red Peak member -
Reddish silty sandstone. Thickness not mentioned

Fig. 3 Partial Stratigraphic Section

Chugwater Group

APPENDIX

PHOTO 1a

Wide angle view of Alcova Limestone. Circled letters correspond to units described in text and shown on Fig. 3.

PHOTO 1b

Close-up of unit 'B' Alcova Limestone. Note Crennulated appearance typical of Stromatolites.

PHOTO 2 (lookingN.W.)

Typicaloutcrop appearance of Alcova Limestone. Ravine has eroded through resistant limestone cap on dipslope, and is cutting down through Red Peak member.

PHOTO 3

Close view typical Alcova Limestone exposure. Unit"B" and"C" are visible.

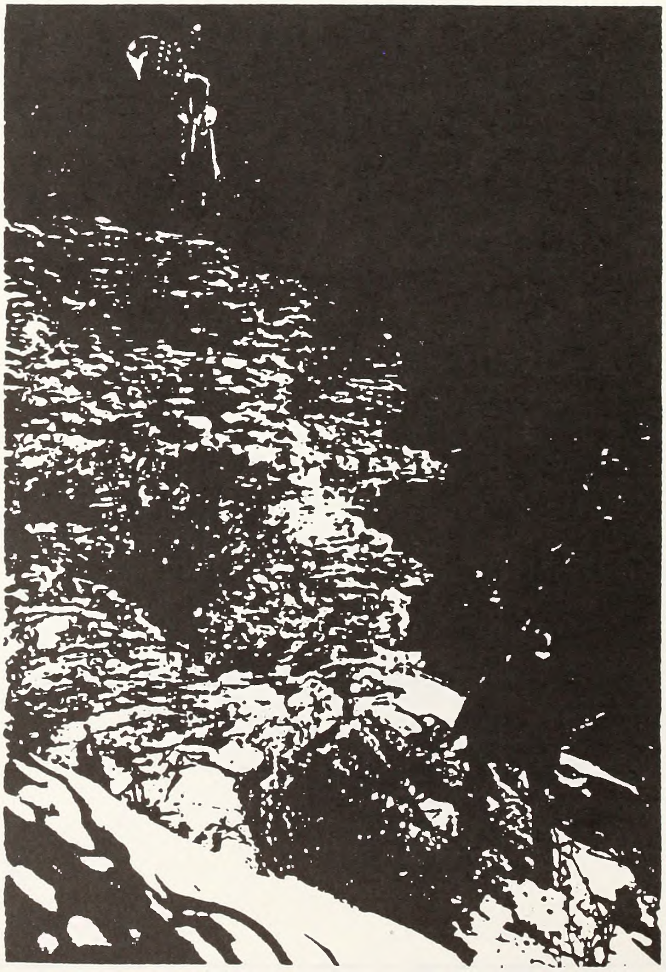


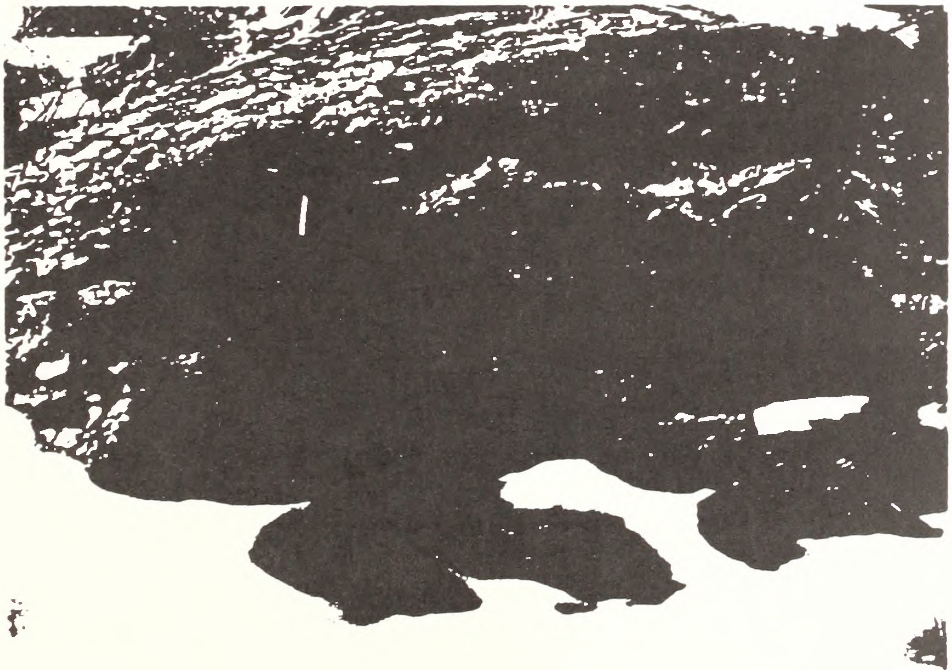
PHOTO 4

Units "B" and "C" in small drainage.

PHOTO 5

Base of unit "C" showing Limestone Intraclasts in silty Matrix.

Note solution cavities, which are usually uncommon in mapping unit.



APPENDIX K:

Legal Descriptions of Nest Areas

Not Available to the Public

APPENDIX L

SURFACE AND MINERAL OWNERSHIP OF NEST AREAS

Careyhurst Nest	Acreage[a]	Percentage
Federal Surface and Minerals	0.00	(0.0%)
Federal Minerals under Nonfederal Surface	399.37	(12.4%)
Nonfederal Surface and Minerals	2,832.63	(87.6%)
Total Federal Minerals	399.37	(12.4%)
Total Nest Area Acres	3,232.00	

Rawhide Nest		
Federal Surface and Minerals	318.00	(14.3%)
Federal Minerals under Nonfederal Surface	280.00	(12.6%)
Nonfederal Surface and Minerals	1,631.77	(73.2%)
Total Federal Minerals	598.00	(26.8%)
Total Nest Area Acres	2,229.77	

Cumulative Totals		
Federal Surface and Minerals	318.00	(5.4%)
Federal Minerals under Nonfederal Surface	679.37	(12.4%)
Nonfederal Surface and Minerals	4,464.40	(81.7%)
Total Federal Minerals	997.37	(18.3%)
Total Nest Area Acres	5,461.77	

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[a] The acreages are based on legal subdivisions and alliquot parts.

APPENDIX M
NWF STANDARDIZED FIELD FORM

NATIONAL WILDLIFE FEDERATION
MIDWINTER BALD EAGLE SURVEY
STANDARDIZED SURVEY FIELD FORM

Survey Site Location **Survey Site Number:** ______

1. State(s): WYOMING 2. County: NATRONA

3. Drainage or Body of Water: ______

4. Site Name: JACKSON CANYON COMMUNAL NIGHT ROOST

Observers

1. Name of Recorder: WILLIE FITZGERALD 2. No. of Observers: 2

3. Address: C/O BLM, P.O. BOX 2420, MILLS, WY 82644

4. Phone: (307) 261 - 5861 5. Affiliation: BLM

Survey Site Description and Survey Conditions

1. Vegetation Type(s) at Survey Site: PONDEROSA PINE

2. A. Overall Prey Availability (*Circle One*): Very Low Low Normal High Very High

B. Types of Prey Available: ______

3. A. Gen. Weather & Ice Conditions: 95% OF THE N. PLATTE RIVER IS ICED OVER

B. Weather (*Circle One*): Very Mild Mild [✓ Normal] Harsh Very Harsh

C. Ice (*Circle One*): Much Less Than Normal Less Than Normal Normal More Than Normal Much More Than Normal

D. Percentage of Ice Cover over Entire Survey Route: ______ %

4. Survey Date: JAN. 13th, 1989 5. Time at Start: 15:29

6. Total Time of Survey (min.): 1:58 7. Roost or Nonroost? ROOST

8. Continuous Route or Fixed Point? FIXED POINT

9. Survey Method (*Circle All That Apply*): Road Vehicle Fixed Wing Helicopter Boat Foot Travel Snowmobile [✓ Other] FIXED POINT

Survey Results

1. Total Bald Eagles Counted: 44 No. of Adults: 26 No. of Immatures: 18
No. of Unknown Age: ______

2. Total Golden Eagles Counted: 10 No. of Adults: 5 No. of Immatures: 5
No. of Unknown Age: ______

Comments: Also 5 eagles of undetermined species and age were seen (distance and/or light conditions were not favorable enough for identification).

APPENDIX N

ACEC MAILING ADDRESSES

O G	ABO Petroleum Corporation		105 S. 4th Street	Artesia, NM 88210
O G	ANR Production Company		Box 749	Denver, CO 80201
O G	APC Operating Partnership, LP		1700 Lincoln, No. 1900	Denver, CO 80203-4519
O G	Amer Equity Partners		Box 344	Greensbord, GA 30642
O G	Anadarko Petroleum Company		Box 1330	Houston, TX 77251
O G	Anderman/Smith and Company		1776 Lincoln, No. 500	Denver, CO 80203
O G	Amerada Hess Corporation		1200 Milam Entex	Houston, TX 77002-5681
O G	Amoco Production Company		1660 Lincoln, No. 3000	Denver, CO 80264
O G	Amoco Western Company		Box 800	Denver, CO 80201
E O	Anderson, Susan		1228 South Ash Street	Casper, WY 82601
O G	Apache Corporation		1700 Lincoln, No. 1900	Denver, CO 80203-4519
O G	Argent Energy Inc.		3817 NW Expressway, No. 700	Oklahoma City, OK 73112
O L	Arnold, John G.		P. O. Box 419038	Kansas City, MO 64183
E G	The Associated General Contractors of Wyoming	Bob Gaukel, Executive Director	P. O. Box 965	Cheyenne, WY 82003
O G	Aztec G&O Corporation		333 N. Rancho Road	Las Vegas, NV 89106
L O/O L	B. B. Brooks Company	H. E. Stuckenhoff, President	Box 1050	Casper, WY 82602
O G	B&P Investments		Box 1718	Fort Worth, TX 76101
O G	Becker, Robert E.		Box 341	Seahurst, WA 98062
L O	Belz, Carlton		1742 Westridge Circle	Casper, WY 82604-3321
O P	Bishop, P. S. and Darlene		1173 Granada	Casper, WY 82601
O L	Bixby, J. R.		P. O. Box 38	Glenrock, WY 82637
O L	Boner Brothers Partnership	c/o Bob Boner	Box 66	Glenrock, WY 82637
E O	Bowron, Les		821 South Beech	Casper, WY 82601
O L	Bradbury, Basil C.		P. O. Box 1900	Glenrock, WY 82637
O G	Brohman, J. A.		Box 215	Chetek, WI 54728
O G	Brown, Maurice W.		614 S. Greeley Highway	Cheyenne, WY 82007-1855
E O	Burke, Michael		100 W. B Street	Casper, WY 82601
O L	Burris, Glen Q.		29423 Pebble Beach Drive	Sun City, CA 92381
L O	Burris, William C.	11115 Goose Egg Road	Alcova Route	Casper, WY 82604
O L	Byer, Larry		14700 Evansville Road, Box 2	Evansville, WY 82636
O G	Cabot Exploration Corporation		Box 4544	Houston, TX 77210-4544
O G	Carlson, Joyce L.		Box 702	Cheyenne, WY 82003
R G	Calvary Baptist Church		1800 S. Conwell	Casper, WY 82601
O G	Carnoustie JNT VNTR		Box 1718	Fort Worth, TX 76101
E G	Casper Area Economic Development Alliance	Carl Adrian, President	111 West 2nd Street, Suite 615	Casper, WY 82601
E G	Casper Chamber of Commerce	Dorothy Perkins	P.O. Box 399	Casper, WY 82602
L O	Casper College Foundation	Swede Erickson, Executive Director	125 College Drive	Casper, WY 82601
R G	Casper Cross Country Ski United	Mike Flacek, President	P. O. Box 1231	Casper, WY 82602
R G	Casper Mountain Snowmobilers Association	Frank Gurnik, President	P. O. Box 3301	Casper, WY 82602

APPENDIX N

ACEC MAILING ADDRESSES

G L	Cheney, Bill		5845 Bates Creek Route	Casper, WY 82604
O L	Childers, Wesley	Strohecker Ranch Company	6220 Raderville Route	Casper, WY 82604
O P	Choma, Mike		2003 S. Poplar St.	Casper, WY 82601
O G	Chorney, Jane E.		555 17th Street, No. 1000	Denver, CO 80202
O G	Chorney, Joan		555 17th Street, No. 1000	Denver, CO 80202-3910
O G	Chorney, Raymond		555 17th Street, No. 1000	Denver, CO 80202
L O	Christensen, Chris H.		Box 51 Casper Mountain Route	Casper, WY 82601
G A	City of Casper, Recreation Department	Larry Harmes, Director	200 North David	Casper, WY 82601
L O	Clayton, Thomas J.		3625 West Garden Cr. Road	Casper, WY 82601
O G	Club Oil and Gas Ltd.		600 17th Street, No. 2300	Denver, CO 80202
O L	Coffman Ranch Co.	c/o Lee Coffman	908 South Durbin St.	Casper, WY 82601
L O	Cole, Sue		246 S. Washington	Casper, WY 82601
L O	Collom, Nola J.		504 South Pennsylvania	Casper, WY 82604
M U	Conoco Pipeline Company		Box 2197	Houston, TX 77252-2197
O G	Conquest Exploration		700 Louisiana, Suite 2100	Houston, TX 77002-2728
G A	Converse County Commissioners	John Pexton, Chairman	107 North 5th	Douglas, WY 82633
G L	Creager, James Popple and Robert	c/o Leo Riley	141 S. Center, Suite 200	Casper, WY 82602
E O	Cubin, Barbara		2241 Belmont Road	Casper, WY 82604
O L	Cummings, Evelyn		2111 Trojan Drive	Casper, WY 82601
L O	Curry III, William H.		3205 Bella Vista Drive	Casper, WY 82601
O G	Dalport Oil Corporation		1401 Elm Street, No. 3471	Dallas, TX 75202
L O	Day, Robert G.		217 North 6th Avenue	Casper, WY 82604
L O	Defreece, Dawn Cheryl		16 Riverbend Road	Casper, WY 82604
G A	Department of Environmental Quality, State of Wyoming	Dennis Hemmer, Director	122 W. 25th Street	Cheyenne, WY 82002
L O	Department of Zoology, Casper College	Randy Webb	125 College Drive	Casper, WY 82601
L O	Dinsmore, James P.		4115 East 8th	Casper, WY 82609
O G	Double Oil and Gas Inc.		address unknown	
R G	Drolet, Jim		1430 S. Illinois	Casper, WY 82609
O P	Dryer, William		2465 Larkspur	Casper, WY 82604
L O	Dryer, William		3000 W Riverbend Road	Casper, WY 82604
L O	Duncan Ranches, Inc.	c/o Hugh Duncan	Boxelder Route	Glenrock, WY 82637
O G	Dyco Petroleum Corporation		7130 S. Lewis, No. 300	Tulsa, OK 74134
O P	Easterly, Tom		112½ S. Cedar	Casper, WY 82601
L O	Elfering, Thomas Lee		82 Marigold	Casper, WY 82601
O G	Ellbogen, John P.		Box 1928	Casper, WY 82602
O G	Enron Oil and Gas Company		1801 California, No. 3400	Denver, CO 80202
O G	Equitable Resource Energy Company		Box 21017	Billings, MT 59104

APPENDIX N

ACEC MAILING ADDRESSES

O P	Fanto, John		501 Trigood	Casper, WY 82601
O L	55 Ranch	c/o Rhea Tillard	Box 58	Douglas, WY 82633
L O	First Christian Church		520 CY Avenue	Casper, WY 82601
L O	Forrister, Judge Robert M.		3514 Terry Ridge Road	Ft. Collins, CO 80524
O P	Forsling, James E.		5120 Alcova Rt. Box 2	Casper, WY 82604
L O	Fowler, H. Eugene and Sylvia	10497 W Goose Egg Road	Alcova Route	Casper, WY 82604
L O	Garman, John K.	10477 Goose Egg Road	Alcova Route	Casper, WY 82604
O L	Garrett Ranch Company		Box 5846 Bates Creek Route	Casper, WY 82644
O G	General Atlantic Resource		410 17th Street, No. 1400	Denver, CO 80202
O P	Gillham, John		Box 613	Mills, WY 82644
O P	Glause, Kelly		Box 797	Evansville, WY 82636
O P	Gnagy, Steve		5120 Alcova Route Box 10	Casper, WY 82604
E O	Goodenough, Keith		P. O. Box 1852	Casper, WY 82602
G A	Goshen County Commissioners	Chairman	P. O. Box 160	Torrington, WY 82440
O P	Gosman, Jeff		139 W. 2nd St. Ste. 1A	Casper, WY 82601
G A	Governor's Planning Office	Rod Miller	Herschler Building	Cheyenne, WY 82002-0020
O L	Green Valley, Inc.	c/o William E. Barber	71 Barber Road, Route 1	Douglas, WY 82633
O G	Guida, Arthur M.		410 17th Street, No. 880	Denver, CO 80202
O L	Hale, Faye		976 Box Elder Road	Glenrock, WY 82637
O G	Hawks Company Ltd. Partnership		Box 2493	Casper, WY 82602
O L	Heiser, Ed		P. O. Box 342	Glenrock, WY 82637
O L	Henry, William		1320 Nottingham Drive	Casper, WY 82609
O G	High Plains Energy Company		1600 Broadway, No. 1565	Denver, CO 80202
E O	Hinchey, Bruce		3401 Provence Court, No. 2	Casper, WY 82609
O G	Hixon Development Company		Box 2810	Farmington, NM 87499
O P	Horn, Barry J.		3324 Aspen Drive	Casper, WY 82601
O L	Howard Farms	c/o Bud Howard	P. O. Box 825	Casper, WY 82602
O L	Hudson, Nancy Bixby		926 Hobson	Lander, WY 82520
O G	Hughes, Byron W.		101 Spencer Cove	Clinton, MS 39056
O P	Jackson, Hugh	Casper Star-Tribune	170 Star Lane	Casper, WY 82601
O G	Jeffers, Jr., William E.		Box 123	Artesia, NM 88210
O G	Jirst Ltd. Partnership		Box 769	Douglas, WY 82633
O G	Johnson, Robert E.		9 Clinton Ct. S.	Palm Coast, FL 32037
O P	Johnston, Elmer N.		234 West 1st Street	Casper, WY 82601
O G	Kaminski, Sophie		22 Archung Road	Wayne, NJ 07470
O L	Keenan, Robert		Box 366	Glenrock, WY 82637
O G	Kerr-McGee Corporation		Box 25861	Oklahoma City, OK 73125
C G	Killean, Cathy		5138 Alcova Route, Box 3	Casper, WY 82604

APPENDIX N

ACEC MAILING ADDRESSES

L O	Krause, Betty		2688 East 7th Street	Casper, WY 82601
O G	Lancaster Corporation		Box 8439	Denver, CO 80201-8439
C G	Izaak Walton League	Roy Larsen	P. O. Box 4867	Casper, WY 82604
L O	Launspach, Dale	c/o Russel L. Launspach, Trustee	Box 188	Evansville, WY 82636
L O	Lawrence, Jim		6578 Terrace Drive	Casper, WY 82604
L O	Layton, Frank and Lois		P. O. Box 2851	Casper, WY 82602
L O	Litaker, Frank		3914 Bethpage Road	Kannapolis, NC 28081
R G	Lost Arrow Archer's Club	Dan Schott, President	P. O. Box 696	Evansville, WY 82636
O G	Louisiana Land and Exploration		1560 Broadway, No. 1200	Denver, CO 80202
L O	Lund, Ronald		11265 Goose Egg Road, Alcova Route	Casper, WY 82604
O G	Luning, Gary		44 Iverness Drive ED	Englewood, CO 80112
O G	Madison Resource Inc.		address unknown	
O L	Manning, Clarice		Box 85	Natrona, WY 82646
O G	Manning Oil Partners		370 17th Street, No. 3650	Denver, Co 80202
O G	Marathon Oil Company		Box 3128	Houston, TX 77253
O G	Marathon Oil Company		Box 2069	Houston, TX 77252
M U	Marathon Oil Company, U.S. Lands and Contracts	R.K. Bitter, Manager	P. O. Box 3128	Houston, TX 77253
O P	Marshall, Joe		P. O. Box 9494	Casper, WY 82609
O G	Maxus Exploration Company		717 N. Harwood Street	Dallas, TX 75201
O P	May, Jim		3705 Ridgecrest	Casper, WY 82604
O P	McCall, R. L.		3008 East 12th St.	Casper, WY 82609
O L	McDaniels, Jack		14700 Evansville Route, Box 1	Evansville, WY 82636
O L	McInroy, Stan and Opal		5120 Alcova Rt. Box 401	Casper, WY 82604
O P	McMurry, Vic		1700 W. Lincolnway No. 173	Cheyenne, WY 82003
M U	McMurry, William		1455 S. Ash	Casper, WY 82601
L O	Merschat, Walter		732 S. Grant	Casper, WY 82601
O L	Metropolitan Farm and Ranch Properties, Inc.	c/o Farmers National Company	Box 80105	Billings, MT 59108
G L	Mills Livestock Company		6165 Raderville Route	Casper, WY 82604
O G	Mobile Oil Corporation		P. O. Box 5444, 1225 17th Street	Denver, CO 80217
O G	Moncrief, Marsland B.		9th and Commerce	Fort Worth, TX 76102
O G	Moncrief, Jr., W. A.		9th At Commerce	Ft. Worth, TX 76102
O P	Montgomery, Bob		P. O. Box 2102	Casper, WY 82602
O L	Moore, Edward			Douglas, WY 82633
O L	Morel Livestock Inc.		119 Harvard Drive	Gillette, WY 82716
O P	Morrison, Mary Lou		845 East Third	Casper, WY 82601
L O	Mullen, Robert and Susie		P. O. Box 2915	Casper, WY 82602
C G	Murie Audubon Society	Bayard D. Rea, President	P. O. Box 2112	Casper, WY 82602
O G	Myco Industries Inc.		105 S. 4th Street	Artesia, NM 88210

APPENDIX N

ACEC MAILING ADDRESSES

O L	Nachtman Land and Livestock, Inc.	c/o Lona Nachtman	2556 Dull Center Road	Douglas, WY 82633
L O	Nall, Jim L.		5810 Bates Creek Route	Casper, WY 82604
E O	Natrona County Commissioners	Jim Sandison, Chairman	200 North Center, Room 115	Casper, WY 82601
G A	Natrona County Parks Board	Kathy Bondi, Member	656 South Park	Casper, WY 82601
G A	Natrona County Parks Board	Bob Carpenter, Member	950 Dundee	Casper, WY 82609-3209
G A	Natrona County Parks Board	John Doyle, Member	P. O. Box 133	Casper, WY 82602
G A	Natrona County Parks Board	Tracy Lamont, Member	3581 East 19th	Casper, WY 82609
G A	Natrona County Parks Board	Thomas Reese, Member	123 West First Street	Casper, WY 82601-2486
G A	Natrona County Parks Department	Sam Weaver, Director	4621 CY Avenue	Casper, WY 82604
G A	Natrona County Planning Department	Jim Brockett, County Planner	P. O. Box 610	Mills, WY 82644
G A	Natrona County Road and Bridge Department	Jim Sullivan	P. O. Box 848	Mills, WY 82644
G A	Natrona County Surveyor	Chris Asbury	P. O. Drawer 848	Mills, WY 82644
C G	The Nature Conservancy	Chris Garber, Research Zoologist	3165 University Station	Laramie, WY 82071
C G	The Nature Conservancy	Ben Pierce	P. O. Box 450	Lander, WY 82520
L O	Niethammer, Jean Marie		2065 South Coffman	Casper, WY 82604
O P	Northern Arapaho Traditional Elders	Francis Brown	P. O. Box 601	Riverton, WY 82501
O G	Northwestern Mutual		720 E. Wisconsin Ave.	Milwaukee, WI 53202
O L	O'Brien, Eleanor		2721 Saratoga Road	Casper, WY 82604
L O	Olson, David		R. R. 1, Box 91	Halfway, OR 97834
O L	O'Neil, James W. and Susan		Casper Mtn. Route, Box 55	Casper, WY 82601
O G	Oxley, John C.		1 W. Third St., No. 1300	Tulsa, OK 74103
O G	Pacific Enterprises Oil Company		1700 Pacific Avenue, No. 1200	Dallas, TX 75201-4697
O L	Parkerton Ranch Company	c/o Jon Nicolaysen	140 North Center	Casper, WY 82601
O L	Patterson Ranch	c/o Joe Patterson	2421 Ross Route	Douglas, WY 82633
O L	Peabody Coal Company		301 North Memorial Drive	St. Louis, MO 63102
E O	Perkins, Dorothy		1014 Surrey Court	Casper, WY 82609
O P	Perry, Pete and Jean		Box 2371	Casper, WY 82602
O P	Peterson, Peggy	Casper District Advisory Council	3519 Partridge Lane	Casper, WY 82604
E G	Petroleum Association of Wyoming	Cheryl M. Feraud	951 Werner Court, No. 100	Casper, WY 82601
O G	Phillips Petroleum Company		Box 1967	Houston, TX 77251-1967
O G	Phillips Petroleum Company		8055 E. Tufts Avenue Parkway	Denver, CO 80237-2898
O G	Phillips Petroleum Company		152 N. Durbin	Casper, WY 82601
O P	Phipps, Joe and Georgia		6141 Raderville Rt.	Casper, WY 82604
O L	Pierce, John E.		P. O. Box 3173	Casper, WY 82602
O L	Pine Mountain Ranch	c/o C. Putman	P. O. Box 2020	Mills, WY 82644
C G	Powder River Basin Resource Council	Chesie Lee, Executive Director	23 North Scott	Sheridan, WY 82801
O G	Prairie Petroleum of Colorado		910 16th Street, No. 610	Denver, CO 80202
O G	Prenalta Corporation		Box 2514	Casper, WY 82602

APPENDIX N

ACEC MAILING ADDRESSES

O G	Presidio Exploration Inc.		5613 DTC Parkway, No. 750	Englewood, CO 80111-3035
O G	Pringle, Chester L.		Box 848	Marble Falls, TX 78654
L O	Randall, Edward J.	5108 Alcova Route	Box 12	Casper, WY 82604
L O	Rea, Bayard D. and Liz		5200 Yesness Lane	Casper, WY 82602
L O	Reed, Bernadine Agnes		1014 South David	Casper, WY 82601
O P	Rice, Patricia A.		1711 Kearny	Casper, WY 82604
M U	Rissler and McMurry Company	Ernest M. Skretteberg, Safety Director	P. O. Box 2499	Casper, WY 82602
M U	Rissler, Don		246 S. Center	Casper, WY 82601
O P	Rognstad, Lucy		2426 South Poplar Street	Casper, WY 82602
O P	Rose, C.		5120 Alcova Rt.	Casper, WY 82604
L O	Rose, Judge Robert		Box 1006	Cheyenne, WY 82001
O G	Rutter Enterprises		Box 3186	Midland, TX 79702
O G	Samedan Oil Corporation		1660 Lincoln, No. 3000	Denver, CO 80264
O G	Santa Fe Energy Company		1 W. 3rd Street, No. 500	Tulsa, OK 74103-3508
O P	Sawin, Bob		P. O. Box 1101	Casper, WY 82602
G L	Schmitt, Armin		75 Magnolia	Casper, WY 82604
O L	Schnoor Land and Livestock		Box 5815	Casper, WY 82604
E O	Scott, Charles		Box 5805 Bates Creek Route	Casper, WY 82602
L O/G L	Scott, Dr. Oliver		5120 Alcova Route, Box 16	Casper, WY 82604
L O	See Ben Realty		150 North Center, Suite 1	Casper, WY 82601
O L	Shepperson, Frank		Box 189	Midwest, WY 82643
O G	Sherwood, Charles		405 Park Drive, No. 2D	Great Falls, MT 59401
O P	Shoshone Indian Tribe	Haman Wise, Sr.	Box 766	Fort Washakie, WY 82514
L O	Shultz, Jack		P. O. Box 1405	Mills, WY 82644
C G	Sierra Club	Connie Wilbert, President	615½ Clark Street	Laramie, WY 82070
C G	Sierra Club	Northern Great Plains Regional Office	23 North Scott, Suite 25	Sheridan, WY 82801
E O	Simpson, Alan, United States Senator	Cherie Burn, Aid	3003 Federal Building	Casper, WY 82601
O P	Skretteberg, Forrest		1203 L.A. Lane	Gillette, WY 82716
M U	Skretteberg, Tami and Ernie		109 N. Colorado	Casper, WY 82609
O P	Snodgrass, William		5120 Alcova Route, Box 21	Casper, WY 82604
O G	Sonat Exploration Company		3817 NW Expressway, No. 700	Oklahoma City, OK 73112
O G	Spelpren Company		Box 2514	Casper, WY 82602
O P	Stalkup, Rodney and Laura		5120 Alcova Route	Casper, WY 82604
O L	Staple Three Sheep Company	c/o Buck Allemand	Box 388	Midwest, WY 82643
O L/G L	Strand, Mary Jane		5816 Bates Creek Route	Casper, WY 82604
O P	Street, Bill A.		2665 East 6th	Casper, WY 82609
O G	Sullivan, Elzalene J.		Box 1001	Ft. Lauderdale, FL 33302
O G	Sun Operating Ltd. Partnership		Box 2880	Dallas, TX 75221

APPENDIX N

ACEC MAILING ADDRESSES

O L	TCM Inc.	c/o J.B. Eccles Jr.	Box 2147	Casper, WY 82602
E O	Tempest, Rick		125 West Second	Casper, WY 82601
O G	Texaco Producing Incorporated	Terry Belton	Box 2100	Denver, CO 80201
O P	Theile, Dan		2848 Coffman Ave.	Casper, WY 82604
E O	Thomas, Craig, United States Congressman	Bobbie Brown, Aid	4003 Federal Building	Casper, WY 82601-1969
O L	True Ranches	c/o David True	P. O. Drawer 2360	Casper, WY 82602
O G	True, Diemer		P. O. Box 2360	Casper, WY 82602
O G	Tyrex Oil Company		Box 2459	Casper, WY 82602
G A	U.S. Bureau of Reclamation (C-700)	Del Holz	P. O. Box 1630	Mills, WY 82644
G A	U.S. Fish and Wildlife Service, Bob Prieksat	Law Enforcement Division	P. O. Box 113	Casper, WY 82602-0113
G A	U.S. Fish and Wildlife Service, Steve Torbit, Ronald G. Starkey, State Supervisor		2617 E. Lincolnway, Suite A	Cheyenne, WY 82001
G A	U.S. Forest Service, Medicine Bow National Forest, Gerald G. Heath, Forest Supervisor		605 Skyline Drive	Laramia, WY 82070-6003
O G	Unit Petroleum Company		Box 702500	Tulsa, OK 74170
O G	Viable Resources Inc.		Box 3192	Casper, WY 82602
E O	Vlastos, Carol Jo		3411 South Coffman	Casper, WY 82604
E O	Wallop, Malcolm, United States Senator	Sue Cole, Special Assistant	2201 Federal Building	Casper, WY 82601
O G	Walstrom, Jr., Louis A.		Box 3120	Seal Beach, CA 90740-2120
O G	Weaver, Wayne K.		156 Valley Drive	Casper, WY 82601
O P	Weikum, Minell and Kelly		6135 Raderville Rt.	Casper, WY 82604
L O	Werner, Diane		P. O. Box 4404	Casper, WY 82604
O G	WGR Incorporated		address unknown	
O G	Wilkerson, William S.		Box 157	Hickory Grove, SC 29717
G A	Wilson, James G., Chairman	Platte County Commissioners	County Courthouse	Wheatland, WY 82201
E O	Wold, Peter		139 West Second Street, Ste. 200	Casper, WY 82601
O G	Wolf, Erving		1001 Fannin, No. 2000	Houston, TX 77002-6709
O G	Wolf, Joyce		1001 Fannin, No. 2000	Houston, TX 77002-6709
O G	Wolf, Mathew		1001 Fannin, No. 2000	Houston, TX 77002-6709
O G	Wolf, Melvin		Box 2062	Denver, CO 80201
O G	Woods Petroleum Corporation		3817 NW Expressway, No. 700	Oklahoma City, OK 73112
O P	Wyoming Association of Professional Archeologists	Dianne M. Berrigan, Government Affairs Chairman	P. O. Box 2108	Casper, WY 82602
G A	Wyoming Game and Fish Department	Terry Cleveland, District Supervisor	2800 Pheasant Drive	Casper, WY 82604
G A	Wyoming Game and Fish Department	Tom Collins, Environmental Specialist	5400 Bishop Boulevard	Cheyenne, WY 82006
G A	Wyoming Game and Fish Department	Sharon Ritter, Nongame Bird Biologist	260 Buena Vista	Lander, WY 82520
E G	Wyoming Geological Association	Ron Baugh, President	P. O. Box 545	Casper, WY 82602
R G	Wyoming Girl Scout Council	Lynn Cameron, Executive Director	P. O. Box 293	Casper, WY 82602
E G	Wyoming Heritage Society	William Schilling	139 West 2nd Street, Suite 3-E	Casper, WY 82601
G A	Wyoming Highway Department	Merwin Moore, District 2 Engineer	P. O. Box 2199	Casper, WY 82602
E G	Wyoming Mining Association	Jack Ratchye, Executive Director	P. O. Box 866	Cheyenne, WY 82003

ACEC MAILING ADDRESSES

O P	Wyoming Mining and Metals Section of AIME	Donna Wichers	401 East E St.	Casper, WY 82601
G A	Wyoming Oil and Gas Conservation Commission	Don Basko, Director	P. O. Box 2640	Casper, WY 82602
C G	Wyoming Outdoor Council	Stephanie Kessler	201 Main	Lander, WY 82520
E G	Wyoming Public Lands Council	Carolyn Paseneaux	P. O. Box 115	Casper, WY 82602
G A	Wyoming State Land and Farm Loan Office	Howard Schriner, Director	122 W. 25th St., Herschler Bldg.	Cheyenne, WY 82002-0600
G A	Wyoming State Forestry Division	Bryce E. Lundell, State Forester	1100 West 22nd Street	Cheyenne, WY 82002
C G	Wyoming Wildlife Federation	John Zelazny	P. O. Box 106	Cheyenne, WY 82203
O G	Yates Drilling Company		105 S. 4th Street	Artesia, NM 88210
O G	Yates, Estelle H.		104 S. 4th Street	Artesia, NM 88210
O P	Young, Jr., M.D., Robert S.		1109 Jason Court	Gillette, WY 82716
L O	Young, William R.	7771 South Bello Camino	Alcova Route	Casper, WY 82604
E O	Zimmerman, Gail		2361 Trojan Drive	Casper, WY 82609

Categories of Parties - Jackson Canyon ACEC

Conservation Groups	C G	Recreational/User Groups	R G
Gov't Agencies	G A	Mineral/ROW Users	M U
Elected Officials	E O	Economic Groups	E G
Grazing Lessees	G L	Other Parties	O P
Landowners/Users	L O	Other Landowners/Users outside ACEC	O L
Oil and Gas Lessee	O G		

APPENDIX O

PARTIES SENT A COPY OF THE HMP

Copies of complete HMP

U. S. Fish & Wildlife Service
Wyoming Game & Fish Dept.

Copies of HMP without nest maps

BLM Casper District Advisory Council
Casper Mountain Fire District
Congressman Thomas, Casper Field Office
Converse County Commissioners
Converse County Fire Department
Converse County Library
Friends of Bessemer Mountain
Goshen County Commissioners
Goshen County Library
Murie Audubon Society
Natrona County Commissioners
Natrona County Fire Department
Natrona County Library
Natrona County Parks Department
Natrona County Planning Department
The Nature Conservancy
Petroleum Association of Wyoming
Platte County Commissioners
Platte County Library
Rissler and McMurry Company
Rocky Mountain Oil and Gas Association
Senator Simpson, Casper Field Office
Senator Wallop, Casper Field Office
Sierra Club, Laramie
State of Wyoming, Forestry Division
State of Wyoming, Highway Department
State of Wyoming, Land Commission
Wyoming Mining Association

APPENDIX P

LETTER TO PARTIES ACKNOWLEDGING COMMENTS ON DRAFT HMP

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Platte River Resource Area
P.O. Drawer 2420
Mills, Wyoming 82644

6780
JC ACEC HMP

DEC 2 4 1991

Dear Interested Citizen:

Thank you for your comments on the Bureau of Land Management, Platte River Resource Area's Bald Eagle Habitat Management Plan (HMP). Your comments are being considered during the decision process, and will be included in the official HMP records.

After reviewing the comments received from interested parties, I need to re-state some key aspects of the HMP to clarify apparent confusion. Any decision made through the HMP will address only bald eagle habitat areas on public lands administered by the Bureau of Land Management. This includes federal mineral estate under non-federal surface, as in oil and gas leasing. The overall objective for preparing the HMP is to manage significant bald eagle and golden eagle habitat on public lands for the continued protection and improvement of those habitats. At no time during HMP development has it been our intention to control or in any way limit private land owner rights. In the final HMP, the phrase, "on public lands" will be included more frequently than it appeared in the draft HMP to make this aspect more clear.

Again, thank you for participating in preparation of the HMP.

Sincerely,

William H Mortimer

William H. Mortimer
Platte River Resource Area Manager

APPENDIX P

W. Volker
2021 Kingsboro
Casper, WY

Scott Evans
5170 Webb Creek
Casper, WY

Kenny Werner
304 N. Jackson
Casper, WY

Marcia Foster
590 Lewis Lane
Casper, WY

Mike Berg
90 Poppi
Casper, WY

John & Bonnie Jolovich
902 East A
Casper, WY

Keith Key
108 North 5th
Casper, WY

Debbie Bean
Tina Gouin
2524 East 12th
Casper, WY

Bill Yates (illegible)
3120 East 5th
Casper, WY

Harold Selby
1028 East "F"
Casper, WY

Carol Frank
59 E. Collins
Casper, WY

Louis & Betty Grunewald
554 South 4th
Casper, WY

Oliver K. Scott
5120 Alcova Route, Box 16
Casper, WY 82604

Richard D. Nyquist
640 West 47th Street
Casper, WY 82601

Wyoming Game and Fish Department
Joe White, Deputy Director
5400 Bishop Boulevard
Cheyenne, WY 82006

First Christian Church
Bill A. Street
520 CY Avenue
Casper, WY 82601

Carlton Belz
1742 Westridge Circle
Casper, WY 82604-3321

Lost Arrow Archer's Club
Dan Schott, President
P. O. Box 696
Evansville, WY 82636

Robert R. Rose, Jr.
P. O. Box 1006
Cheyenne, WY 82003

Wyoming Girl Scout Council
Lynn Cameron, Executive Director
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Casper, WY 82602

Al & Lorean Stegelman
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Casper, WY 82604

Fred C. Klein
Box 2711
Casper, WY 82602

Larry R. Strol (illegible)
390 Aster
Casper, WY 82604

Bob Hulbert
725 Long Lane
Casper, WY 82609

Larry W. & Arlene Coshow
7313 W. Cactus Lane
Casper, WY 82604

Natrona County Parks Department
4621 CY Avenue
Casper, WY 82604

Petroleum Association of Wyoming
Cheryl M. Feraud
951 Werner Court, No. 100
Casper, WY 82601

Wyoming State Land and Farm Loan Office
Howard Schriner, Director
122 W. 25th St., Herschler Bldg.
Cheyenne, WY 82002-0600

Steve Johnston
167 S. Conwell, Suite 1
Casper, WY 82601

The Nature Conservancy
Richard G. Studenmund
P. O. Box 450
Lander, WY 82520

Paul J. Manly
P. O. Box 37
Casper, WY 82602

U.S. Bureau of Reclamation (C-420)
John Lawson
P. O. Box 1630
Mills, WY 82644

Murie Audubon Society
Tom Varcalli, President
P. O. Box 2112
Casper, WY 82602

Frank and Lois Layton
P. O. Box 2851
Casper, WY 82602

Danny R. Hobbs
Bates Creek Route No. 5823
Casper, WY 82604

William H. Curry III
3205 Bella Vista Drive
Casper, WY 82601

Bayard D. and Liz Rea
5200 Yesness Lane
Casper, WY 82602

Wyoming State Parks & Historic Sites
Jim Smail, Coordinator
P. O. Box 270
Shoshoni, WY 82649

Mr. & Mrs. Robert W. Eckhart C.P.M.
1281 Payne
Casper, WY 82609

Rissler & McMurry Co.
W. N. McMurry, President
P. O. Box 2499
Casper, WY 82602

Brion J. Peterson
P. O. Box 3351
Casper, WY 82601

William Snodgrass
5120 Alcova Route, Box 21
Casper, WY 82604

Casper Snowmobile Association
P. O. Box 3301
Casper, WY 82601

Tom Warren
Box 3673
Casper, WY 82602

Dale Miller
Midwest, WY 82643

Ben A. Martinez
1912 S. Washington
Casper, WY 82601

Dean Blevins
Box 9803
Casper, WY 82602

Steve Man (illegible)
Box 463
Mills, WY 82644

Dean A. Jack (illegible)
Box 1612
Mills, WY 82644

Robin Guin (illegible)
Box 2004
Casper, WY

Dale McCormick
367 Indian Paintbrush
Casper, WY

Martin Sullivan
77 Primrose
Casper, WY

APPENDIX Q

MAJOR REVISIONS TO DRAFT HMP

The following list summarizes major revisions made to the November 1991 draft HMP. These revisions include correcting dates, acreages, and legal descriptions; expanding the data or further analyzing it; taking into account public comments received on the draft; and, modifiying statements or sections. Some sections in the draft did not follow the established sequence and were relocated. New sections, including additional appendices, were also added. Minor corrections or changes resulting from editing (such as spelling or sentence restructuring) are not included in the list.

To aid the reader, page numbers from the November 1991 draft and the May 1992 final HMP are referenced. As a result of editing, a line-by-line comparison between the draft and final HMP may not always be easily performed.

11/92 Draft Page Number	05/92 Final Page Number	Revision Made
I-1	1	Difference between RMP analysis and HMP analysis of bald eagle habitat.
I-3	4	Two paragraphs on public participation added.
I-4	5	Discussion of Endangered Species Act added.
I-7	8-9	Discussion of difference between mineral material competitive sales vs. noncompetetive sales processes.
AE-2	13	Acreage of bald eagle habitat corrected.
	13	Clarification of actions BLM has responsibility for on private surface- federal minerals lands added.
AE-4	16	Discussion of reforestation project through 1995 in ACEC added.
AE-5	17	Explanation of bald eagle migration added.
AE-6	18-19	1992 roost count data added to Table 1.
AE-7	20	Discussion of how roost boundaries were determined, and how land use decisions are applied to roosts added. Two tables illustrating roost acreages added.
AE-17	34-35	Rangeland resources information corrected to reflect change of landownership in the ACEC. Grazing lessee comments on allotment uses added.

AE-22	40-41	Legal description and general setting information on Cole Creek Roost corrected.
AE-24	43-44	Mineral resources data and rangeland resources information for the Cole Creek Roost corrected.
AE-43	70	Information on bald eagle nesting habitat and behavior added. Discussion of how nest areas are determined added. Information on application of land use decisions in bald eagle nesting areas added. (This is contained in the new "Introduction" section of the "Bald Eagle Nests" section.)
AE-46	76	Information on bald eagle feeding habitat and behavior added (as introduction to the "Bald Eagle Feeding Habitat" section).
AE-58	90	Information about bald eagle use of flyways added.
AE-60	92	Information on Emigrant Gap surface occupancy land use decisions, and the legal description of the lands subject to the decision, added.
MO-1	96	Roosting habitat acreage corrected.
PA-1	97	Information about new sections, "Preferred Alternative" and "Cumulative Impacts," added. ACEC acreage corrected.
PA-2	98	Access Alternative B revised to clarify what lands would be subject to BLM authorization under the alternative.
PA-5	104	New "Boundary Adjustment Alternative" added. Alternative A of the "Other Minerals" section corrected to reflect status of stipulations on current oil and gas leases in the ACEC.
PA-7	105	Cole Creek Roost, Alternative C, corrected to reflect availability of lands in the roost for disposal.
PA-8	107	Information added in the "Minerals" section, All Roosts, Alternative B, to clarify application of the alternative on existing lease facilities.
PA-9	108-110	Feeding Habitat Areas, North Platte River, Alternatives A and B revised to clarify the actions planned under the alternatives, and to make it clear that the Cole Creek Roost is not included in the alternatives.

PA-10	108	Dates corrected in Nests, Alternative A. The entire "Nests" section moved to follow roosts and precede feeding habitat and flyways.
	110	Legal description and acreage of no surface development restriction added to Flyways, Alternative A.
	111	New section, "Preferred Alternative," added after this page.
EC-1	116-117	Information on cultural resources, Native American religious concerns, and statutory requirements authorizations, added.
EC-3	119	Grazing lessee information corrected.
EC-4	120	R&PP lease holder comments on draft HMP added.
EC-6	122	R&PP lease holder comments on draft HMP added.
EC-8	124	R&PP lease holder comments on draft HMP added. Alternative B revised to conform with corrections made in the "Planned Actions" section. Information on conformance of Alternative B with RMP decisions corrected.
EC-11	127	Information on conformance of Alternative C with RMP decisions corrected.
EC-12	128	R&PP lease holder comments on draft HMP added.
EC-16	132	Additional analysis of the impact of exchange on the state grazing lessee included.
	133	Discussion of mineral values considerations in exchange added.
EC-17	131	Discussion of the state's comments on impacts of exchange added.
EC-19	132	Discussion of the state's comments on impacts of exchange added.
EC-27	144	Information on impact of quarry on allotment AUMs added. Discussion of impacts on fire suppression added.
EC-28	145	Visual quality impact analysis for Mineral Materials, Alternative A, added. Impact analysis of development of state 40 acres in ACEC added.

EC-29	147	Information on impact of quarry on allotment AUMs added. Discussion of impacts on fire suppression added.
EC-30	148-155	New section, the environmental consequences of the new "Boundary Adjustment Alternative," added following the "Mineral Materials" section and preceeding the "Other Minerals" section. In "Other Minerals," Alternative A, the acreage of withdrawn lands added. Information on oil and gas leases corrected.
EC-31	157	Analysis of seasonal occupancy oil and gas lease development removed (all leases in the ACEC are issued subject to year-round no surface occupancy). Information on oil and gas potential, and impacts on lessees added.
EC-32	157	Information on oil and gas leases corrected. Analysis of seasonal occupancy oil and gas lease development removed (all leases in the ACEC are issued subject to year-round no surface occupancy). Information on oil and gas potential, and impacts on lessees added.
EC-34	158	Acreage of withdrawn lands added.
EC-37	158	Alternative C revised to conform with clarifications made in "Planned Actions" section.
EC-45	170	Alternative B revised to conform with clarifications made in "Planned Actions" section.
EC-48	173-178	"Nests" environmental consequences section moved to follow roosts and precede feeding habitat areas. Feeding Habitat, North Platte River, Alternative A revised to conform with clarifications made in "Planned Actions" section.
EC-50	178	Information added to Alternative B to conform with clarifications made in "Planned Actions" section.
EC-51	178	Information on conformance of Alternative B with RMP decisions corrected.
EC-56	173	Nests, Alternative A, dates corrected.
EC-58	183-194	New section, "Cumulative Impacts," including a table showing the preferred alternative," added after this page.
PR-1	198	Information on when forms will be completed and how forms will be used added.

C-1	203-204	Discussion of coordination with other agencies, and with organizations and the public added. Discussion of comments on the draft HMP added.
WE-1	206	Information on the cost of HMP preparation added.
P-2	208-209	Information on public notification and the availability of the draft HMP added. Discussion of BLM actions, and coordination efforts, taken after review of comments on the draft HMP added.
P-3	210	Action Plan "Introduction" section added.
P-4 & 5	211-213	Format of this section revised. Cost estimates added.

MAPS

	38	Map 4 boundary and land status corrected.
	41	Map 5 boundary and land status corrected.
	48	Map 7 land status corrected.
	58	Map 10 land status corrected.
	74	Map 15 boundary and land status corrected.
	99	Map 17 revised to show ACEC boundary and public lands.
	(back)	Map 18 land status corrected, and map revised to show Boundary Adjustment Alternative.
	109	New Map 19 made to show surface occupancy RMP decision restrictions on the North Platte River.

APPENDICES

All		All appendices were renumbered.
New appendices:		Consultation Under the Endangered Species Act (B), Legal Description of Roosts (D), Legal Description of Nests (K), Surface and Mineral Ownership of Nests (L), Major Revisions to Draft HMP (Q), Letter Notifying of Draft HMP Availability (Y), and Public Notice Advertisement (Z)

APPENDIX R

Public Affairs Plan
Jackson Canyon

Public Affairs Problem Defined:

Various participants have offered solutions for protecting and managing the bald eagle habitat in the Platte River Resource Area. The Platte River Resource Area has been managing the habitat. The area was designated an Area of Critical Environmental Concern (ACEC) in the 1985 Resource Management Plan decision document.

Various participants have identified future interests in various forms of development in the area that could prevent the BLM from meeting its legal responsibility for protecting and managing the eagle habitat.

Specific resource values are present in the bald eagle ACEC and habitat areas. Information from an HMP is needed to prescribe actions based on the allocation of the resources affected by an ACEC and HMP.

Participants, both external and internal, have identified solutions for the management of the resources and have made these suggestions known to the congressional delegation. Additional information that can be provided by the HMP will help determine the validity of the solutions or help participants reach a proper and acceptable compromise.

Because of other priorities, the BLM has not completed a Habitat Management Plan as required under the 1985 Resource Management Plan. Potential conflicts have placed the HMP in a high priority position.

Background:

The Jackson Canyon area was designated as a Rare and Uncommon Area by the State of Wyoming Environmental Quality Council in 1978. In 1980, BLM designated it an Area of Critical Environmental Concern through the Management Framework Plan. Specific land use decisions regarding the ACEC and bald eagle habitat were made in the 1985 Resource Management Plan (RMP).

BLM has a responsibility under the Endangered Species and Federal Land Policy and Management Acts to ensure that federal undertakings do not jeopardize bald eagle habitat, and to enhance bald eagle habitat. Further, RMP decisions made in 1985 required BLM to prepare and implement a plan for the bald eagle ACEC and habitat in the resource area. The RMP identified that BLM's goal for bald eagle habitat was management for the protection of that habitat.

At present, BLM cannot fulfill the requirements of these laws without preparing and implementing an ACEC and Habitat Management Plan. This plan would provide BLM the "formula" of specific resource management actions to manage the multiple resources present in bald eagle habitat areas.

Bald eagle habitat in the PRRA could be jeopardized unless an ACEC and Habitat Management Plan is prepared to specifically protect and manage that habitat, as required by RMP decisions made in 1985. This habitat could be threatened by the development of state or federal minerals, the improvement of access roads, unrestricted winter recreation use, or the harvest of timber from habitat areas.

Resource Values:

The following values are present in the bald eagle ACEC and habitat areas, and a specific allocation of these resources is needed to implement RMP decisions for bald eagle habitat. These resource values may be affected by an ACEC and Habitat Management Plan.

- Bald eagle habitat
- Federal minerals (oil and gas, and mineral materials)
- State minerals (oil and gas, and mineral materials)
- Timber
- Recreation
- Fire suppression
- Private land residential development
- Access (relates to all of the above values)

OBJECTIVES

1. To complete a Habitat Management Plan by September 1991.
2. To use the HMP process as a method to identify issues and conflicts that would prevent BLM from properly meeting the objective of an ACEC and RMP.
3. To identify actions to resolve potential conflicts.
4. To involve the public by scheduling at least one public meeting in Casper in February.

PLANNING AND PROGRAMMING (What should we do?)

Research the social environment by gathering information for the purpose of describing and understanding the situations as viewed by the public and check out assumptions and determine public relations consequences.

APPENDIX R

Actions Steps for Objective 2: (actions steps will be identified for each objective)

Step 1 — Identify persons, organizations directly or indirectly involved, identify issues.

Key Publics	Issues
Wyoming State Government	wildlife timber recreation minerals land exchanges access
Natrona County Commissioners	R&PPs access timber residential fire Suppression
US Fish and Wildlife	Section 7 consultation (initiated)
Special Interest Groups	
Congressional	all issues

Step 2 — Schedule meetings with identified persons and organizations.

Step 3 — Plan Meetings (How do we do it and what do we say).

Step 4 — Identify who wants it an why (be honest). Name names (for BLM use only) to assess the conflicts that will arise. Researching will help prepare for pre-scoping and scoping meetings.

Prepare briefing materials: Slide presentation – 10 minutes (use a pre-recorded automatic audio).

Materials (suggestions):

A. Data on Eagles: (# of roost, causes for displacement of eagles, authority for eagle protection.

B. Data on location of ACEC. Who and what is in and near the ACEC that could be a potential problem (overhead with overlays would work great.)

C. Identify all of the solutions suggested thus far. What are the obstacles.

Step 5 — Hold meetings with key individuals or organizations.

Action:

Give slide presentation.
Explain how we assume they will be affected ("we assume you are interested because.....").
Provide hypothetical situation and ask what solution they suggest ("If the area is closed what will happen?" "If the state issues a mining permit, what would result?").
Ask individuals what they assume will be the concerns.
Seek names of key informants (those who have access to information and may be sources of information).
LISTEN

Step 6 — Schedule meeting with State Director
7 — Update Key Participants of pre-scoping findings
8 — Schedule Public Meeting
9 — Schedule presentation of Advisory Council
10 — Issue Press release
11 — Develop mailing list
12 — Send letter on meeting to all on mailing list
13 — Prepare presentation

SCHEDULE

Date	Action	Responsibility
	Prepare briefing materials	
	Identify key individuals	
	Schedule meeting	
	Edit dry run of presentation	
	Attend meetings	
	Take notes	
	Develop mailing list	

0061G:01/11/91
Approved 02-20-91

APPENDIX S

BALD EAGLE HMP PUBLIC HANDOUTS

Department of Interior
Bureau of Land Management
Casper District
Platte River Resource Area

Jackson Canyon Area of Critical Environmental Concern
and
Bald Eagle Habitat Management Plan

QUESTIONS AND ANSWERS

Where is Jackson Canyon?

"Jackson Canyon" is a canyon on the western flank of Casper Mountain, approximately 9 miles southwest of Casper.

Jackson Canyon was designated a Rare and Uncommon Area by the State of Wyoming Environmental Quality Council on August 8, 1978 due to the discovery of poisoned bald and golden eagles in 1971, making it the first known eagle roost in the Casper area. During subsequent land use planning in 1978-80, BLM designated 11,150 acres of public land encompassing the Jackson Canyon roost and the Little Red Creek roost as the Jackson Canyon "Area of Critical Environmental Concern" (ACEC).

Natrona County's Casper Mountain Land Use Plan, completed in February, 1985, identifies the ACEC and resources present there, making special provision for protection of those resources. The Nature Conservancy has also undertaken a major role in protection and enhancement of the habitat in the ACEC by acquiring conservation easements on much of the private land within this area.

What is an ACEC?

ACECs are designated under the Federal Land Policy and Management Act of 1976 (FLPMA). FLPMA defines an ACEC as: "areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards."

Why does the Jackson Canyon ACEC deserve special management?

The canyon is deeply incised and provides an excellent habitat area for eagle roosting due to relative inaccessibility, cliffs and steep canyon walls for perching and take-off, old-growth ponderosa pine trees for roosting, and proximity of the North Platte River and rangelands which are heavily used for feeding. The eagles use the nearby Emigrant Gap anticline as a flyway between feeding areas and roosts.

An estimated 200 to 250 bald eagles migrate from Canada to spend the winter in East-Central Wyoming. Several hundred golden eagles are found here year-round. The first bald eagles arrive during October each year. As many as 60 to 90 bald eagles and 10 to 20 golden eagles roost in the Jackson Canyon ACEC from January to mid-February. The last of the bald eagles leave in April to nest in Canada, while many golden eagles stay to nest in Wyoming.

Special management at the overnight roosts is important for two reasons. First, bald eagles are much more sensitive to disturbances at these sites than to disturbances at feeding areas or when using flyways. Second, the amount of habitats - or sites - used for roosting is quite limited, whereas much of the resource area is used for feeding and a number of flyways are used.

What is BLM doing to protect bald eagle habitat in the Jackson Canyon ACEC, and in other areas?

The BLM is directed to maintain and improve the bald eagle habitat on public lands in coordination with the U.S. Fish and Wildlife Service (USFWS) and the Wyoming Game & Fish Department (WGFD). These agencies work together under national and state level Memorandums of Understanding. BLM is responsible for habitat management, the WGFD is responsible for the state's wildlife, and, the USFWS is responsible for the bald eagle and for ensuring that federal actions do not jeopardize bald eagles.

The BLM is in the process of preparing a Habitat Management Plan (HMP). An HMP is a site specific activity plan for a geographic area of public lands which identifies wildlife habitat management actions to be implemented in achieving specific objectives related to Resource Management Plan (the BLM's land use plan) decisions.

The purpose is to manage habitats on the public lands for the conservation and rehabilitation of fish, wildlife, and plant resources consistent with multiple-use management principles. To meet this objective it is necessary to promote the development and implementation of HMPs for the conservation of sensitive, threatened, and endangered (T&E) animals officially listed by Federal or State agencies.

The HMP will include other bald eagle habitat areas in the Platte River Resource Area that have been discovered since the RMP was completed in 1985. The HMP will identify what types of human activities impact bald eagles and what that impact is, and will also evaluate the cumulative effects of BLM actions in the area. A comprehensive approach to management of the ACEC, and other areas of important bald eagle habitat, will be the end result.

Once the HMP has been completed, BLM will begin implementation of the actions determined to be appropriate for the ACEC and other habitat areas. After the HMP has been approved and implementation is underway, regular followup monitoring will be performed.

Where does BLM get direction?

The Endangered Species Act of 1973 (ESA) requires BLM to ensure recovery of listed species on BLM administered lands as well as to ensure that any Federal action authorized, funded, or carried out is not likely to jeopardize the continued existence of T&E species or result in destruction or adverse modification of critical habitat.

The Federal Land Policy and Management Act of 1976 (FLPMA) identifies "fish and wildlife development and utilization" as a principal or major land use; requires consideration of fish and wildlife resources before approval of land exchanges; authorizes investigations, studies, and experiments involving the improvement, management, use, and protection of the public lands and their resources; and, neither enlarges nor diminishes the responsibilities and authorities of the State for management of fish and resident wildlife.

The National Environmental Policy Act of 1969 (NEPA) requires Federal agencies to utilize a systematic, interdisciplinary approach to ensure the use of natural and social sciences, and environmental design arts in any planning or decisionmaking that might impact man's environment. NEPA established a national environmental policy to, among other things, encourage productive and harmonious relationships between man and his environment and to enrich the understanding of ecological systems and natural processes important to the nation.

The Migratory Bird Treat Act of 1918 established a Federal responsibility for protection of the international migratory bird resource.

The Bald Eagle Act of 1940 provides for protection of the bald eagle (national emblem) and the golden eagle by prohibiting except under certain specific conditions the taking, possession and commerce in such birds.

The Sikes Act of 1960 extended authority for wildlife program development to public lands administered by the U.S. Forest Service and BLM. BLM was mandated to plan, develop, maintain and coordinate programs for the conservation and rehabilitation of wildlife, fish, and game. The act requires BLM to implement on-the-ground wildlife habitat improvement and protection programs, and to protect and manage both Federal and State-listed T&E species.

03/07/91

A Brief History of the of the Jackson Canyon Area of Critical Environmental Concern

"Jackson Canyon" is the name given to a canyon on the west end of Casper Mountain, which the famous photographer William Henry Jackson photographed in 1870. Poisoned bald and golden eagles were found in the canyon in 1971, making it the first known eagle roost in the Casper area. Jackson Canyon is located on the western flank of Casper Mountain, approximately 9 miles southwest of Casper in Natrona County, Wyoming. The canyon is deeply incised and provides an excellent habitat area for eagle roosting due to relative inaccessibility, cliffs and steep canyon walls for perching and take off, old-growth ponderosa pine trees for roosting, and proximity of the North Platte River and rangelands, which are heavily used for feeding. The eagles use the nearby Emigrant Gap anticline as a flyway between feeding areas and roosts.

An estimated 200 to 250 bald eagles migrate from Canada to spend the winter in East-Central Wyoming. Several hundred golden eagles are found here year round. The first bald eagles arrive during October of each year. As many as 60 to 90 bald eagles and 10 to 20 golden eagles roost in the Jackson Canyon ACEC during the peak of winter (January to mid-February). The last of the bald eagles leave during April to nest in Canada, while many golden eagles stay to nest in Wyoming.

Jackson Canyon was designated a Rare and Uncommon Area by the State of Wyoming Environmental Quality Council on August 8, 1978. During subsequent land use planning effort in 1978-80, the Bureau of Land Management designated 11,150 acres of public land encompassing both the Jackson Canyon roost and the Little Red Creek roost as the Jackson Canyon Area of Critical Environmental Concern or "ACEC". Specific land use planning decisions were made by BLM to restrict land and resource uses which are not compatible with Bald Eagle use of the area. Since 1978, management of Bald Eagle habitat has been the major wildlife issue for BLM in the Platte River Resource Area. The ACEC designation was reaffirmed and continued in 1985 in BLM's Platte River Resource Area Resource Management Plan.

Natrona County's Casper Mountain Land Use Plan identifies the ACEC area and the resources present there, making special provision for protection of those resource values. The Nature Conservancy has also undertaken a major role in protection and enhancement of eagle habitat in the ACEC area through acquisition of conservation easements on much of the private land within this area.

The best known place to view the eagles without disturbing them is at the Alcova Highway (Wyoming 220) pulloff, opposite the Goose Egg Road. During winter, scores of bald and golden eagles can be seen soaring overhead in the late afternoon hours as they return from feeding areas to the remote canyon roosts.

APPENDIX S

BUREAU OF LAND MANGEMENT

PRESCOPING MEETINGS

JACKSON CANYON AREA OF CRITICAL ENVIRONMENTAL CONCERN

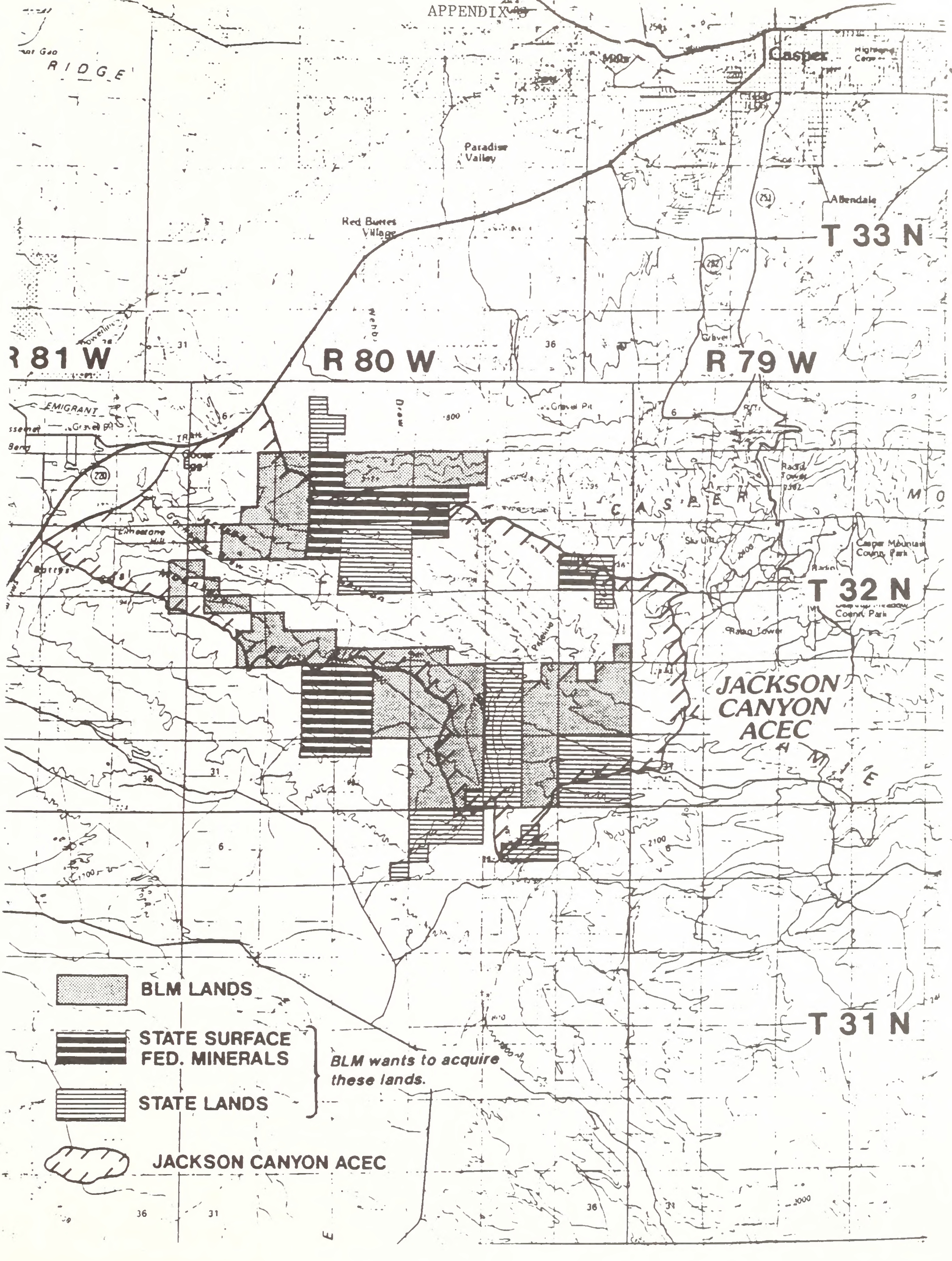
* The Platte River Resource Area is one of three resource areas within the Bureau of Land Management Casper District Office. It includes the counties of Natrona, Converse, Platte, and Goshen, which encompasses a total of approximately 1.4 million surface acres.

* A Habitat Management Plan (HMP) is a site specific activity plan. The objective of HMP implementation is to identify wildlife habitat management actions that are consistent with multiple-use management principles to manage for the conservation of the bald eagle.

* The public is given the opportunity during "prescoping" to participate in the process before the the HMP is drafted. The purpose of scoping is to determine, with input from the public and various entities, including agency staff, significant issues and concerns relating to the current and future management of the Jackson Canyon ACEC and other known bald eagle roosts in the Resource Area.

* A slide presentation on the special features found within the Jackson Canyon ACEC will be provided during the "prescoping" meeting as well as a discussion on issues and concerns identified by agency staff. If you are unable to attend the meeting, information that will help you prepare you comments will be forwarded at your request.

APPENDIX [illegible]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Casper
Paradise Valley
Red Buttes Village
Allendale
T 33 N
R 81 W
R 80 W
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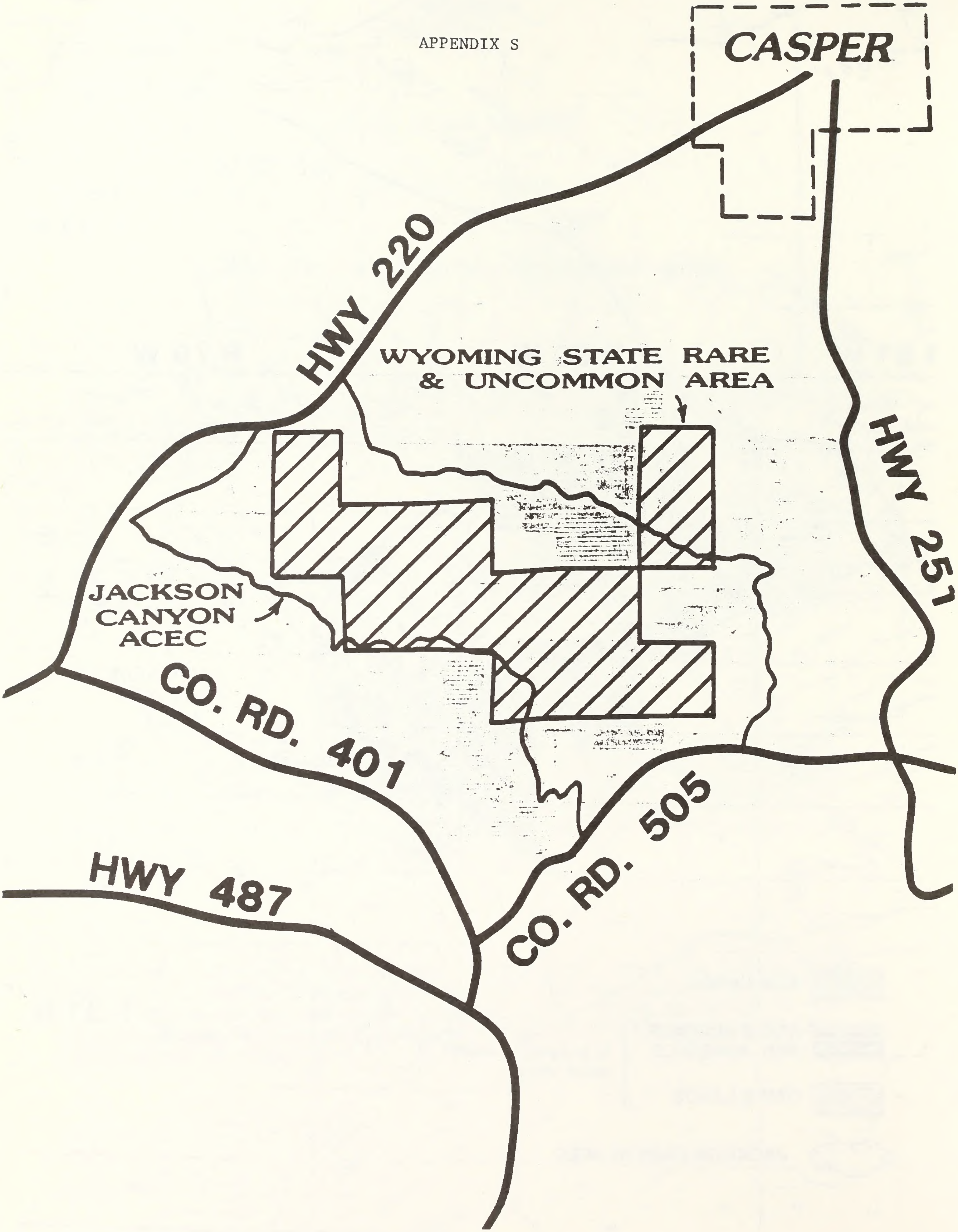
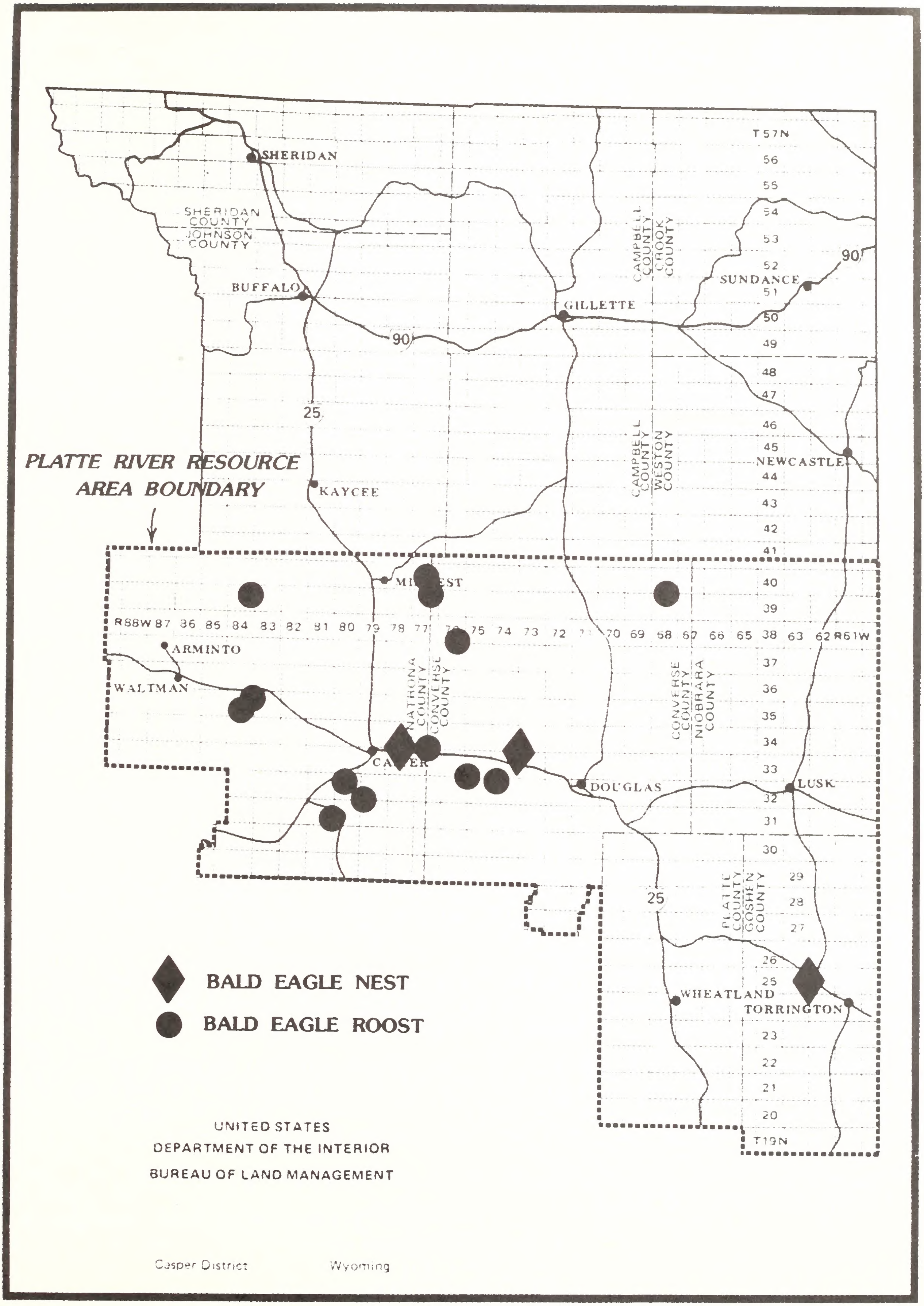
EMIGRANT TRAIL
Gravel Pit
Goose Egg
CASPER MO
Casper Mountain County Park
T 32 N
JACKSON CANYON ACEC
T 31 N
BLM LANDS
STATE SURFACE FED. MINERALS
STATE LANDS
BLM wants to acquire these lands.
JACKSON CANYON ACEC


CASPER
HWY 220
HWY 251
WYOMING STATE RARE
& UNCOMMON AREA
JACKSON
CANYON
ACEC
CO. RD. 401
CO. RD. 505
HWY 487

APPENDIX S


PLATTE RIVER RESOURCE AREA BOUNDARY
◆ BALD EAGLE NEST
● BALD EAGLE ROOST
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Casper District
Wyoming
SHERIDAN
SHERIDAN COUNTY
JOHNSON COUNTY
BUFFALO
GILLETTE
CAMPBELL COUNTY
CROOK COUNTY
SUNDANCE
CAMPBELL COUNTY
WESTON COUNTY
NEWCASTLE
KAYCEE
MIDWEST
ARMINTO
WALTMAN
CASPER
NATRONA COUNTY
CONVERSE COUNTY
CONVERSE COUNTY
NIOBRARA COUNTY
DOUGLAS
LUSK
PLATTE COUNTY
GOSHEN COUNTY
WHEATLAND
TORRINGTON
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APPENDIX S

Department of Interior
Bureau of Land Management
Casper District
Platte River Resource Area

Jackson Canyon Area of Critical Environmental Concern
and
Bald Eagle Habitat Management Plan

APRIL 4 PUBLIC MEETING AGENDA

Introductions	Kate DuPont, BLM Casper District
Slide Presentation	Kate DuPont, BLM Casper District
Discussion of Prescoping Meetings	Celia Skillman, Team Leader, BLM Platte River Resource Area
Issues and Concerns Presented at Prescoping Meetings	Bill Mortimer, Area Manager, BLM Platte River Resource Area
Answers to Some Commonly Asked Questions	Celia Skillman, Team Leader, BLM Platte River Resource Area
Discussion of Comments Received at Prescoping Meetings	Bill Mortimer, Area Manager, BLM Platte River Resource Area
HMP Process	Celia Skillman, Team Leader, BLM Platte River Resource Area
Question & Answer Period	Bill Mortimer, Area Manager, BLM Platte River Resource Area

* * * * * * * * * *

The purpose of this public meeting is to determine, with input from the public, the significant issues and concerns relating to the current and future management of the Jackson Canyon ACEC and other known bald eagle habitats in the BLM's Platte River Resource Area.

During the question and answer period, you are encouraged to tell us what issues or concerns you believe may arise when management of bald eagle habitats and the ACEC is addressed in the Habitat Management Plan.

We are very interested in hearing your views about potential resource use conflicts, and solutions to those possible conflict situations. Further, if you, or someone you know, has information which could be useful to us in preparation of the HMP, we would appreciate receiving that information.

Comment sheets have been provided for your use. Please submit written comments by May 1, 1991 to:

BLM Platte River Resource Area
P. O. Box 2420
Mills, WY 82644

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

PLATTE RIVER RESOURCE AREA
P.O. Box 2420
815 Connie Street
Mills, Wyoming 82644

TAKE PRIDE IN AMERICA

IN REPLY REFER TO

Jackson Canyon Area of Critical Environmental Concern and Bald Eagle Habitat Management Plan

COMMENT SHEET

Name (Please Print)	Address	Affiliation

COMMENTS:

Do you want to be on the mailing list?

APPENDIX S

ACEC	Area of Critical Environmental Concern
ADM	Assistant District Manager/ Associate District Manager
AFO	All Field Officials
AM	Area Manager
AMP	Allotment Management Plan
APD	Application for Permit to Drill
API	American Petroleum Institute
AR	Abandonment Report
ARPA	Archaeological Resource Protection Act
AWP	Annual Work Plan
AY	Available Year
BEPA	Bald Eagle Protection Act
BLM	Bureau of Land Management
BMT	Bureau Management Team
BPS	Bureau Planning System
CDO	Casper District Office
CEQ	Council on Environmental Quality
CMA	Cooperative Management Agreement
CORR	Correspondence
CRIS	Comprehensive Resource Inventory System
CRMP	Coordinated Resource Management Plan
CRMP	Coordinated Resource Management & Planning
DAC	District Advisory Council
DEIS	Draft Environmental Impact Statement
DEQ	Department of Environmental Quality(WY)
DES	Draft Environmental Statement
DGB	District Grazing Board
DM	District Manager
DO	District Office
DOI	Department of the Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
FCLAA	Federal Coal Leasing Amendment Act
FEIS	Final Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
FMV	Fair Market Value
FORMA	Federal Oil & Gas Royalty Management Act
FOIA	Freedom of Information Act
FR	Federal Register
FS	Forest Service(also USGS)
FWS	Fish and Wildlife Service
HAZMAT	Hazardous Material
HMP	Habitat Management Plan
HWDP	Hazardous Waste Disposal Program
IPAMS	Independent Petroleum Association of Mountain States
IPAA	Independent Petroleum Association of America
ISC	Industrial Siting Council(Wyoming)
KCLA	Known Coal Leasing Area
L&RR	Lands and Renewable Resources
LUP	Land Use Plan
LWCF	Land and Water Conservation Fund
MLR	Management of Lands and Resources
ML&SM	Mining Law and Salable Minerals
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRA	Newcastle Resource Area
NTL	Notice to Lessee(O&G)
NWSRA	National Wild and Scenic Rivers Act
OB	Operating Budget
O&G	Oil and Gas
OHA	Office of Hearings and Appeals
OMB	Office of Management and Budget
OPA	Office of Public Affairs
P&A	Plug & Abandon
PAW	Petroleum Association of Wyoming
PDEIS	Preliminary Draft Environmental Impact Statement
PDP	Preliminary Development Plan
P&EA	Planning and Environmental Assistance(District)
PIA	Public Input Analysis
PIO	Public Information Officer
PPA	Preplanning Analysis
PRRA	Platte River Resource Area
RA	Resource Area
RAMP	Recreation Area Management Plan
RARE	Roadless Area Review and Evaluation
RMP	Resource Management Plan
RPA	Resource Planning Act
R&PP	Recreation and Public Purposes
SCS	Soil Conservation Service
SEAM	Surface Environment and Mining
SHPO	State Historic Preservation Officer
SIOW	Shut-in Oil Well
SMA	Surface Management Agency
SN	Sundry Notice(and Report on Well O&G)
WOGCC	Wyoming Oil & Gas Conservation Commission
WPE	Word Processing Equipment
WSA	Wilderness Study Area
WSHD	Wyoming State Highway Department
WSO	Wyoming State Office

APPENDIX T

PRESCOPING MEETING MAILING LIST

MAILING LIST USED TO NOTIFY PARITES
OF EACH OF THE FOLLOWING MEETINGS

March 14, 1991 10:00 a.m. Meeting

Dan Calb
Red Arrow Archer's Club
3571 Teton
Casper, WY 82609

Frank Gurnik, President
Casper Mountain Snowmobilers Association
P. O. Box 3301
Casper, WY 82602

Mike Flacek, President
Casper Cross Country Ski United
P. O. Box 1231
Casper, WY 82602

March 14, 1991 2:00 p.m. Meeting

Susan Anderson
1228 South Ash Street
Casper, WY 82601

Charles Scott
Box 5805 Bates Creek Route
Casper, WY 82602

Diemer True
P. O. Box 2360
Casper, WY 82602

Gail Zimmerman
2361 Trojan Drive
Casper, WY 82609

Les Bowron
821 South Beech
Casper, WY 82601

Barbara Cubin
2241 Belmont Road
Casper, WY 82604

Keith Goodenough
P. O. Box 1852
Casper, WY 82602

Bruce Hinchey
3401 Provence Court, No. 2
Casper, WY 82609

Dorothy Perkins
1014 Surrey Court
Casper, WY 82609

Rick Tempest
125 West Second
Casper, WY 82601

Carol Jo Vlastos
3411 South Coffman
Casper, WY 82604

Peter Wold
139 West Second Street, Ste. 200
Casper, WY 82601

Michael Burke
100 W. B Street
Casper, WY 82601

APPENDIX T

March 14, 1991 7:00 p.m. Meeting

Charles Scott
Box 5805 Bates Creek Route
Casper, WY 82602

Mary Jane Strand
5816 Bates Creek Route
Casper, WY 82604

Bill Cheney
5845 Bates Creek Route
Casper, WY 82604

Bayard D. Rea
P. O. Box 2112
Casper, WY 82602

Walter Merschat
732 S. Grant
Casper, WY 82601

Jean Marie Niethammer
2065 South Coffman
Casper, WY 82604

Judge Robert Rose
Box 1006
Cheyenne, WY 82001

Judge Robert M. Forrister
3514 Terry Ridge Road
Ft. Collins, CO 80524

David Olson
R. R. 1, Box 91
Halfway, OR 97834

Dale Launspach
c/o Russel L. Launspach, Trustee
Box 188
Evansville, WY 82636

Calvary Baptist Church
1800 S. Conwell
Casper, WY 82601

Lynn Cameron, Executive Director
Wyoming Girl Scout Council
P. O. Box 293
Casper, WY 82602

Conoco Pipeline Company
Box 2197
Houston, TX 77252-2197

Swede Erickson, Executive Director
Casper College Foundation
125 College Drive
Casper, WY 82601

Randy Webb
Department of Zoology
Casper College
125 College Drive
Casper, WY 82601

Sam Weaver, Director
Natrona County Parks Department
4621 CY Avenue
Casper, WY 82604

Jim Brockett, County Planner
Natrona County Planning Department
P. O. Box 610
Mills, WY 82644

Chris Asbury
Natrona County Surveyor
P. O. Drawer 848
Mills, WY 82644

H. E. Stuckenhoff, President
B. B. Brooks Company
Box 1050
Casper, WY 82602

Larry Harmes, Director
City of Casper, Recreation Department
200 North David
Casper, WY 82601

Kathy Bondi, Member
Natrona County Parks Board
656 South Park
Casper, WY 82601

Bob Carpenter, Member
Natrona County Parks Board
3912 Dorset Court
Casper, WY 82601

March 14, 1991 7:00 p.m. Meeting Continued

John Doyle, Member
P. O. Box 133
Natrona County Parks Board
Casper, WY 82602

Tracy Lamont, Member
Natrona County Parks Board
3581 East 19th
Casper, WY 82609

Thomas Reese, Member
Natrona County Parks Board
111 West 2nd Street
Casper, WY 82601

Peggy Peterson
Casper District Advisory Council
3519 Partridge Lane
Casper, WY 82604

Armin Schmitt
75 Magnolia
Casper, WY 82604

Craig Thomas, United States Congressman
Bobbie Brown, Aid
4003 Federal Building
Casper, WY 82601-1969

Alan Simpson, United States Senator
Joe Ratliff, Aid
3003 Federal Building
Casper, WY 82601

Malcolm Wallop, United States Senator
Sue Cole, Special Assistant
2201 Federal Building
Casper, WY 82601

APPENDIX T

March 15, 1991 10:00 a.m. Meeting

Bayard D. Rea, President
Murie Audubon Society
P. O. Box 2112
Casper, WY 82602

Ben Pierce
The Nature Conservancy
P. O. Box 450
Lander, WY 82520

Roy Larsen
Izaak Walton League
P. O. Box 4867
Casper, WY 82604

March 18, 1991 12:00 Noon Meeting

Jim Sandison, Chairman
Natrona County Commissioners
200 North Center, Room 115
Casper, WY 82601

Jim Sullivan
Natrona County Road & Bridge Dept.
P. O. Box 848
Mills, WY 82644

Sam Weaver, Director
Natrona County Parks Department
4621 CY Avenue
Casper, WY 82604

Chris Asbury, County Surveyor
Natrona County Road & Bridge Dept.
P. O. Box 848
Mills, WY 82644

Jim Brockett, County Planner
Natrona County Planning Department
P. O. Box 610
Mills, WY 82644

March 18, 1991 3:00 p.m. Meeting

Jack Ratchye, Executive Director
Wyoming Mining Association
P. O. Box 866
Cheyenne, WY 82003

William Schilling
Wyoming Heritage Society
139 West 2nd Street, Suite 3-E
Casper, WY 82601

Cheryl M. Feraud
Petroleum Association of Wyoming
951 Werner Court, No. 100
Casper, WY 82601

Carolyn Paseneaux
Wyoming Public Lands Council
P. O. Box 115
Casper, WY 82602

Dorothy Perkins
Casper Chamber of Commerce
P.O. Box 399
Casper, WY 82602

Carl Adrian, President
Casper Area Economic Development Alliance
111 West 2nd Street, Suite 615
Casper, WY 82601

March 18, 1991 3:00 p.m. Meeting Continued

Merwin Moore, District 2 Engineer
Wyoming Highway Department
P. O. Box 2199
Casper, WY 82602

Bob Gaukel, Executive Director
The Associated General Contractors of Wyoming
P. O. Box 965
Cheyenne, WY 82003

Don Basko, Director
Wyoming Oil & Gas Conservation Commission
P. O. Box 2640
Casper, WY 82602

Bryce E. Lundell, State Forester
Wyoming State Forestry Division
1100 West 22nd Street
Cheyenne, WY 82002

Ron Baugh, President
Wyoming Geological Association
P. O. Box 545
Casper, WY 82602

Ernest M. Skretteberg, Safety Director
Rissler and McMurry Company
P. O. Box 2499
Casper, WY 82602

March 18, 1991   7:00 p.m. Meeting

Del Holz
U. S. Bureau of Reclamation (C-700)
P. O. Box 1630
Mills, WY 82644

Terry Cleveland, District Supervisor
Wyoming Game & Fish Department
2800 Pheasant Drive
Casper, WY 82604

John Zelazny
Wyoming Wildlife Federation
P. O. Box 106
Cheyenne, WY 82203

Stephanie Kessler
Wyoming Outdoor Council
P. O. Box 1449
Lander, WY 82520

Chesie Lee, Executive Director
Powder River Basin Resource Council
23 North Scott
Sheridan, WY 82801

Wyoming Sierra Club
Northern Great Plains Regional Office
23 North Scott, Suite 25
Sheridan, WY 82801

Cathy Killean
5138 Alcova Route, Box 3
Casper, WY 82604

Stan McInroy
2305 Oxford Lane
Casper, WY 82601

APPENDIX T

Department of Interior
Bureau of Land Management
Casper District
Platte River Resource Area

Jackson Canyon Area of Critical Environmental Concern and Bald Eagle Habitat Management Plan

PRESCOPING MEETING AGENDA

Opening Remarks, Introductions	Bill Mortimer, BLM Platte River Resource Area Manager
Discussion of Prescoping Meeting Purpose	Celia Skillman, BLM Platte River Resource Area
Slide Presentation	Kate DuPont, BLM Casper District
Discussion of Issues and Concerns	Bill Mortimer, BLM Platte River Resource Area Manager
Open Discussion	Celia Skillman, BLM Platte River Resource Area

* * * * * * * * * *

The purpose of the prescoping meeting is to determine, with input from the public, the significant issues and concerns relating to the current and future management of the Jackson Canyon ACEC and other known bald eagle habitats in the BLM's Platte River Resource Area.

During the open discussion period, you are encouraged to tell us what issues or concerns you believe may arise when management of bald eagle habitats and the ACEC is addressed in the Habitat Management Plan.

We are very interested in hearing your views about potential resource use conflicts, and solutions to those possible conflict situations. Further, if you, or someone you know, has information which could be useful to us in preparation of the HMP, we would appreciate receiving that information.

Comment sheets have been provided for your use. Please submit written comments by April 15, 1991 to:

BLM Platte River Resource Area
P. O. Box 2420
Mills, WY 82644

6780

Bureau of Land Management
Casper District
Platte River Resource Area

Jackson Canyon Area of Critical Environmental Concern
and
Bald Eagle Habitat Management Plan

Information on Prescoping Meetings

The mailing list used for each meeting is attached.

March 7, 1991

Meeting held with Sue Cole, Aid, Senator Wallop, and Bart Rea, President, Murie Audubon Society, at their request. Representing BLM, Bill Mortimer, Celia Skillman, and Willie Fitzgerald, Platte River Resource Area (PRRA), and Kate DuPont, Casper District (CDO) were present at this meeting held in the Casper District Office. The meeting followed the agenda for all prescoping meetings (see attached), and was used as a "dry run" of that agenda.

March 8, 1991

Bill Mortimer, PRRA, met with Howard Schriner, Wyoming State Land Commissioner, and Paul Cleary, Deputy Land Commissioner, in Schriner's office in Cheyenne.

March 14, 1991

10:00 a.m. meeting scheduled with the Casper Mtn. Snowmobilers Assoc., the Lost Arrow Archers Club, and Cross-country Ski United. No one from these groups attended the meeting.

2:00 p.m. meeting scheduled with the Natrona County Legislators. Susan Anderson attended this meeting. The meeting followed the prescoping meeting agenda.

7:00 p.m. meeting scheduled with ACEC area landowners and lessees. ACEC HMP team members present were: Bill Mortimer, Celia Skillman, and Willie Fitzgerald, PRRA, and Kate DuPont, CDO. The meeting followed the prescoping meeting agenda. Landowners/lessees present were:

Frank & Lois Layton
R. L. Launspach
Randy Webb
Dr. Oliver Scott
Armin A. Schmitt
Sue Cole
Ernie & Tami Skretteberg
Charles Scott

March 15, 1991

10:00 a.m. meeting scheduled with the Murie Audubon Society, The Nature Conservancy, and the Izaak Walton League. Frank and Lois Layton from the Murie Audubon Society attended the meeting. Because the Laytons had attended the landowner meeting the previous day, this meeting was conducted as an informal discussion period between Bill Mortimer and Willie Fitzgerald, PRRA, and the Laytons.

March 18, 1991

12:00 noon meeting scheduled with the Natrona County Commissioners, Natrona County Planning Dept., Road & Bridge Dept., Parks Dept., and the County Surveyor. ACEC HMP team members present were: Bill Mortimer, Celia Skillman, Willie Fitzgerald, Randy Sorenson, and Dorothy Moore, PRRA, and Kate DuPont, CDO. The meeting followed the prescoping meeting agenda. County personnel present were:

Jim Sandison, Co. Comm.
Terry Wingerter, Co. Comm.
Sam Weaver, Parks Dept.
Jim Sullivan, Road & Brdg.
Eric Distad, Co. Comm.
Marion Bouzis, Co. Comm.
Mary Cisneros, Planning Dept.

March 18, 1991

3:00 p.m. meeting scheduled with area commodity users and economic development groups. ACEC HMP team members present were: Bill Mortimer, Celia Skillman, Willie Fitzgerald, Randy Sorenson, and Dan Benoit, PRRA, and Kate DuPont, CDO. The meeting followed the prescoping meeting agenda. Members of the public in attendance were: Merwin G. Moore, Wyoming Highway Dept. (WHD); and, W. McMurry and Ernie Skretteberg, Rissler and McMurry Company.

7:00 p.m. meeting scheduled with conservation and wildlife groups, and the Wyoming Game & Fish Dept. and Bureau of Reclamation. No one from these groups attended the meeting.

APPENDIX U

PUBLIC MEETING LETTER AND MAILING LIST

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
PLATTE RIVER RESOURCE AREA
P.O. DRAWER 2420
MILLS, WYOMING 82644

TAKE PRIDE IN AMERICA

6780/Jackson Canyon
ACEC HMP

MAR 2 2 1991

Dear Interested Public:

The BLM Platte River Resource Area has begun preparation of a Habitat Management Plan (HMP) for the Jackson Canyon Area of Critical Environmental Concern (ACEC), and other known bald eagle habitat areas in Natrona, Converse and Goshen Counties. You are invited to attend a meeting on Thursday, April 4 at 7 p.m. at the BLM Casper District Office (located at 1701 East E Street). At the meeting we will present information about the project, and ask for your input for consideration during HMP preparation.

In March, prescoping meetings were held with interested individuals and groups to provide them information about the Jackson Canyon area and the HMP process, and to hear their concerns about management of bald eagle habitat areas. At the April 4 meeting, we will present a summary of the comments, issues and concerns received during the prescoping meetings.

A copy of the news release sent to area media is enclosed for your information.
We would appreciate hearing your views about management of the Jackson Canyon ACEC and other bald and golden eagle habitat areas in the Platte River Resource Area, and would appreciate any additional pertinent information you may want to provide us about management of the areas. Your written comments will be considered during HMP preparation, and will become part of the official HMP records.

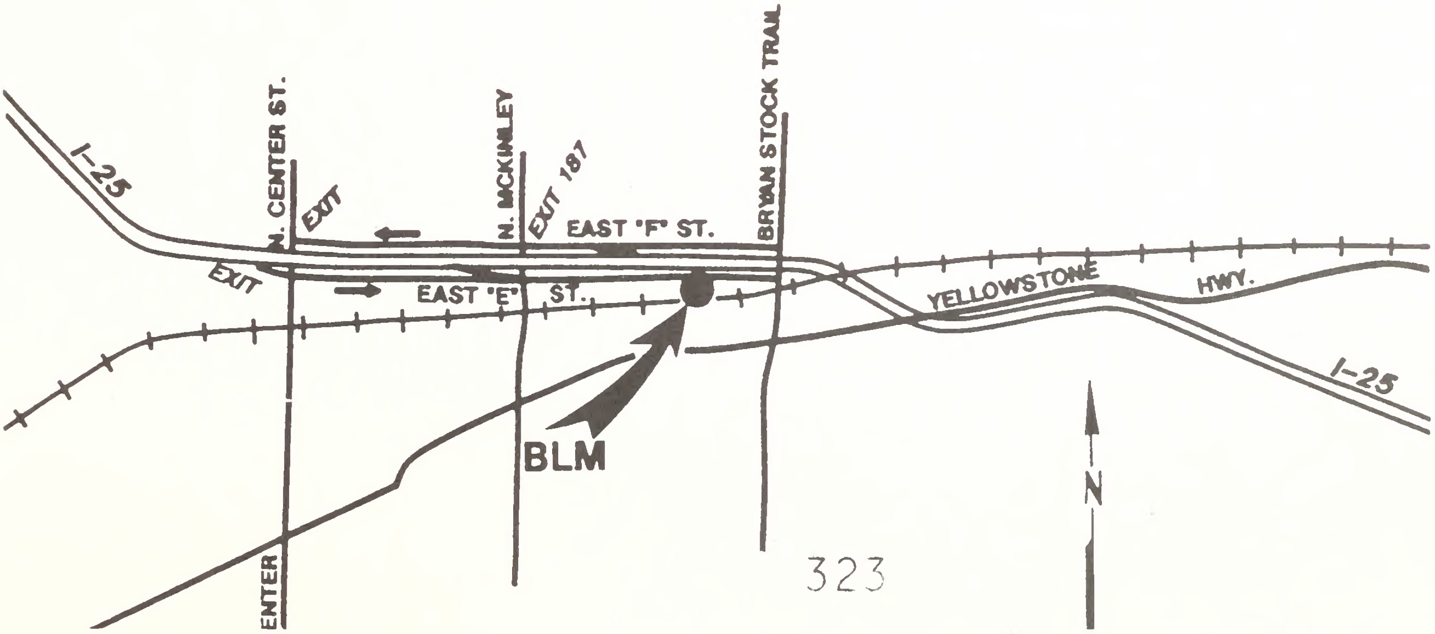
A map showing how to reach the BLM Casper District Office is provided with this letter. If you have any questions, please contact Celia Skillman of my staff at (307) 261-7519, or send correspondence to the above address.

Sincerely,

William H Mortimer

Platte River Resource Area Manager

Enclosures



ALPHA

ACEC MAILING ADDRESSES

E G	Adrian, Carl, President	Casper Area Economic Development Alliance	111 West 2nd Street, Suite 615	Casper, WY 82601
E O	Anderson, Susan		1228 South Ash Street	Casper, WY 82601
O L	Arnold, John G.		P. O. Box 419038	Kansas City, MO 6418
G A	Asbury, Chris	Natrona County Surveyor	P. O. Drawer 848	Mills, WY 82644
O L	B. B. Brooks Company	c/o H.E. Stuckenhoff	Box 1050	Casper, WY 82602
E G	Basko, Don, Director	Wyoming Oil & Gas Conservation Commission	P. O. Box 2640	Casper, WY 82602
E G	Baugh, Ron, President	Wyoming Geological Association	P. O. Box 545	Casper, WY 82602
O L	Bixby, J. R.		P. O. Box 38	Glenrock, WY 82637
G A	Bondi, Kathy, Member	Natrona County Parks Board	656 South Park	Casper, WY 82601
O L	Boner Brothers Partnership	c/o Bob Boner	Box 66	Glenrock, WY 82637
E O	Bowron, Les		821 South Beech	Casper, WY 82601
O L	Bradbury, Basil C.		P. O. Box 1900	Glenrock, WY 82637
G A	Brockett, Jim, County Planner	Natrona County Planning Department	P. O. Box 610	Mills, WY 82644
E O	Burke, Michael		100 W. B Street	Casper, WY 82601
O L	Burris, Glen Q.		29423 Pebble Beach Drive	Sun City, CA 92381
L O	Burris, William C.	11115 Goose Egg Road	Alcova RT	Casper, WY 82604
O L	Byer, Larry		14700 Evansville Road, Box 2	Evansville, WY 82636
R G	Calvary Baptist Church		1800 S. Conwell	Casper, WY 82601
R G	Cameron, Lynn, Executive Director	Wyoming Girl Scout Council	P. O. Box 293	Casper, WY 82602
G A	Carpenter, Bob, Member	Natrona County Parks Board	950 Dundee	Casper, WY 82609-320
G L	Cheney, Bill		5845 Bates Creek Route	Casper, WY 82604
O L	Childers, Wesley	Strohecker Ranch Company	6220 Raderville RT	Casper, WY 82604
L O	Christensen, Chris H.		Box 51 Casper Mountain RT	Casper, WY 82601
L O	Clayton, Thomas J.		3625 West Garden Cr. Road	Casper, WY 82601
C G	Cleveland, Terry, District Supervisor	Wyoming Game & Fish Department	2800 Pheasant Drive	Casper, WY 82604
O L	Coffman Ranch Co.	c/o Lee Coffman	908 South Durbin St.	Casper, WY 82601
L O	Collom, Nola J.		504 South Pennsylvania	Casper, WY 82604
M U	Conoco Pipeline Company		Box 2197	Houston, TX 77252-21
G L	Creager, James Popple & Robert	c/o Leo Riley	141 S. Center, Suite 200	Casper, WY 82602
E O	Cubin, Barbara		2241 Belmont Road	Casper, WY 82604
O L	Cummings, Evelyn		2111 Trojan Drive	Casper, WY 82601
L O	Curry III, William H.		3205 Bella Vista DR	Casper, WY 82601
L O	Day, Robert G.		217 North 6th Avenue	Casper, WY 82604
L O	Defreece, Dawn Cheryl		16 Riverbend Road	Casper, WY 82604
L O	Dinsmore, James P.		4115 East 8th	Casper, WY 82609
G A	Doyle, John, Member	Natrona County Parks Board	P. O. Box 133	Casper, WY 82602
L O	Dryer, William		3000 W Riverbend Road	Casper, WY 82604
L O	Duncan Ranches, Inc.	c/o Hugh Duncan	Boxelder RT	Glenrock, WY 82637

APPENDIX U
ACEC MAILING ADDRESSES

L O	Elfering, Thomas Lee		82 Marigold	Casper, WY 8
L O	Erickson, Swede, Executive Director	Casper College Foundation	125 College Drive	Casper, WY 8
E G	Feraud, Cheryl M.	Petroleum Association of Wyoming	951 Werner Court, No. 100	Casper, WY 8
O L	55 Ranch	c/o Rhea Tillard	Box 58	Douglas, WY
L O	First Christian Church		520 CY Avenue	Casper, WY 8
R G	Flacek, Mike, President	Casper Cross Country Ski United	P. O. Box 1231	Casper, WY 8
L O	Forrister, Judge Robert M.		3514 Terry Ridge Road	Ft. Collins,
L O	Fowler, H. Eugene	10497 W Goose Egg Road	Alcova RT	Casper, WY 8
C G	Garber, Chris, Research Zoologist	The Nature Conservancy	3165 University Station	Laramie, WY
L O	Garman, John K.	10477 Goose Egg Road	Alcova RT	Casper, WY 8
O L	Garrett Ranch Company		Box 5846 Bates Creek RT	Casper, WY 8
E G	Gaukel, Bob, Executive Director	The Associated General Contractors of Wyoming	P. O. Box 965	Cheyenne, WY
E O	Goodenough, Keith		P. O. Box 1852	Casper, WY 8
O L	Green Valley, Inc.	c/o William E. Barber	71 Barber Road, RT 1	Douglas, WY
R G	Gurnik, Frank, President	Casper Mountain Snowmobilers Association	P. O. Box 3301	Casper, WY 8
O L	Hale, Faye		976 Box Elder Road	Glenrock, WY
G A	Harmes, Larry, Director	Recreation Department	200 North David	Casper, WY 8
O L	Heiser, Ed		P. O. Box 342	Glenrock, WY
O L	Henry, William		1320 Nottingham Drive	Casper, WY 82
E O	Hinchey, Bruce		3401 Provence Court, No. 2	Casper, WY 8
C G	Holz, Del	U. S. Bureau of Reclamation (C-700)	P. O. Box 1630	Mills, WY 82
O L	Howard Farms	c/o Bud Howard	P. O. Box 825	Casper, WY 8
O L	Hudson, Nancy Bixby		926 Hobson	Lander, WY 8
C G	Kessler, Stephanie	Wyoming Outdoor Council	201 Main	Lander, WY 8
C G	Killean, Cathy		5138 Alcova Route, Box 3	Casper, WY 8
L O	Krause, Betty		2688 East 7th Street	Casper, WY 8
G A	Lamont, Tracy, Member	Natrona County Parks Board	3581 East 19th	Casper, WY 8
C G	Larsen, Roy	Izaak Walton League	P. O. Box 4867	Casper, WY 8
L O	Launspach, Dale	c/o Russel L. Launspach, Trustee	Box 188	Evansville, W
L O	Lawrence, Jim		6578 Terrace Drive	Casper, WY 8
L O	Layton, Frank		P. O. Box 2851	Casper, WY 8
C G	Lee, Chesie, Executive Director	Powder River Basin Resource Council	23 North Scott	Sheridan, WY
L O	Litaker, Frank		3914 Bethpage Road	Kannapolis, N
L O	Lund, Ronald		11265 Goose Egg Road, Alcova Route	Casper, WY 8
F G	Lundell, Bryce E., State Forester	Wyoming State Forestry Division	1100 West 22nd Street	Cheyenne, WY
O L	Manning, Clarice		Box 85	Natrona, WY
O L	McDaniels, Jack		14700 Evansville RT, Box 1	Evansville, W
C G	McInroy, Stan		2305 Oxford Lane	Casper, WY 8
L O	Merschat, Walter		732 S. Grant	Casper, WY 8
O L	Metropolitan Farm & Ranch Properties, Inc.	c/o Farmers National Company	Box 80105	Billings, MT

G A	Miller, Rod	Governor's Planning Office	Herschler Building	Cheyenne, W
G L	Mills Livestock Company		6165 Raderville RT	Casper, WY
O L	Moore, Edward			Douglas, WY
E G	Moore, Merwin, District 2 Engineer	Wyoming Highway Department	P. O. Box 2199	Casper, WY
O L	Morel Livestock Inc.		119 Harvard Drive	Gillette, W
L O	Mullen, Robert		P. O. Box 2915	Casper, WY
O L	Nachtman Land and Livestock, Inc.	c/o Lona Nachtman	2556 Dull Center Road	Douglas, WY
L O	Nall, Jim L.		5810 Bates Creek Route	Casper, WY
L O	Niethammer, Jean Marie		2065 South Coffman	Casper, WY
O L	O'Brien, Eleanor		2721 Saratoga Road	Casper, WY
L O	Olson, David		R. R. 1, Box 91	Halfway, OR
O L	Parkerton Ranch Company	c/o Jon Nicolaysen	140 North Center	Casper, WY
E G	Paseneaux, Carolyn	Wyoming Public Lands Council	P. O. Box 115	Casper, WY
O L	Patterson Ranch	c/o Joe Patterson	2421 Ross Route	Douglas, WY
O L	Peabody Coal Company		301 North Memorial Drive	St. Louis,
E G	Perkins, Dorothy	Casper Chamber of Commerce	P.O. Box 399	Casper, WY
E O	Perkins, Dorothy		1014 Surrey Court	Casper, WY
O P	Peterson, Peggy	Casper District Advisory Council	3519 Partridge Lane	Casper, WY
C G	Pierce, Ben	The Nature Conservancy	P. O. Box 450	Lander, WY
O L	Pierce, John E.		P. O. Box 3173	Casper, WY
O L	Pine Mountain Ranch	c/o C. Putman	P. O. Box 2020	Mills, WY
L O	Randall, Edward J.	5108 Alcova RT	Box 12	Casper, WY
E G	Ratchye, Jack, Executive Director	Wyoming Mining Association	P. O. Box 866	Cheyenne, W
L O	Rea, Bayard D.		P. O. Box 2112	Casper, WY
C G	Rea, Bayard D., President	Murie Audubon Society	P. O. Box 2112	Casper, WY
L O	Reed, Bernadine Agnes		1014 South David	Casper, WY
G A	Reese, Thomas, Member	Natrona County Parks Board	123 West First Street	Casper, WY
O L	Robert Keenan		Box 366	Glenrock, W
L O	Rose, Judge Robert		Box 1006	Cheyenne, W
E O	Sandison, Jim, Chairman	Natrona County Commissioners	200 North Center, Room 115	Casper, WY
E G	Schilling, William	Wyoming Heritage Society	139 West 2nd Street, Suite 3-E	Casper, WY
G L	Schmitt, Armin		75 Magnolia	Casper, WY
O L	Schnoor Land and Livestock		Box 5815	Casper, WY
R G	Schott, Dan, President	Last Arrow Archer's Club	P. O. Box 696	Evansville,
G A	Schriner, Howard, Director	Wyoming State Land & Farm Loan Office	122 W. 25th St., Herschler Bldg.	Cheyenne, W
E O/G L	Scott, Charles		Box 5805 Bates Creek Route	Casper, WY
G L	Scott, Dr. Oliver		5120 Alcova Route, Box 16	Casper, WY
L O	See Ben Realty		150 North Center, Suite 1	Casper, WY
O L	Shepperson, Frank		Box 189	Midwest, WY
L O	Shultz, Jack		P. O. Box 1405	Mills, WY
E O	Simpson, Alan, United States Senator	Joe Ratliff, Aid	3003 Federal Building	Casper, WY
E G	Skretteberg, Ernest M., Safety Director	Rissler and McMurry Company	P. O. Box 2499	Casper, WY

APPENDIX U
ACEC MAILING ADDRESSES

O L	Staple Three Sheep Company	c/o Buck Allemand	Box 388	Midwest, WY
O L	Strand, Mary Jane		5816 Bates Creek RT	Casper, WY
G L	Strand, Mary Jane		5816 Bates Creek Route	Casper, WY
L O	Stuckenhoff, H. E., President	B. B. Brooks Company	Box 1050	Casper, WY
G A	Sullivan, Jim	Natrona County Road & Bridge Department	P. O. Box 848	Mills, WY
O L	TCM Inc.	c/o J.B. Eccles Jr.	Box 2147	Casper, WY
E O	Tempest, Rick		125 West Second	Casper, WY
E O	Thomas, Craig, United States Congressman	Bobbie Brown, Aid	4003 Federal Building	Casper, WY
O L	True Ranches	c/o David True	P. O. Drawer 2360	Casper, WY
E O	True, Diemer		P. O. Box 2360	Casper, WY
E O	Vlastos, Carol Jo		3411 South Coffman	Casper, WY
E O	Wallop, Malcolm, United States Senator	Sue Cole, Special Assistant	2201 Federal Building	Casper, WY
G A	Weaver, Sam, Director	Natrona County Parks Department	4621 CY Avenue	Casper, WY
L O	Webb, Randy	Department of Zoology, Casper College	125 College Drive	Casper, WY
L O	Werner, Diane		P. O. Box 4404	Casper, WY
E O	Wold, Peter		139 West Second Street, Ste. 200	Casper, WY
C G	Wyoming Sierra Club	Northern Great Plains Regional Office	23 North Scott, Suite 25	Sheridan, WY
L O	Young, William R.	7771 South Bello Camino	Alcova RT	Casper, WY
C G	Zelazny, John	Wyoming Wildlife Federation	P. O. Box 106	Cheyenne, WY
E O	Zimmerman, Gail		2361 Trojan Drive	Casper, WY

Categories of Parties - Jackson Canyon ACEC

Conservation Groups	C G	Recreational/User Groups	R G
Gov't Agencies	G A	Mineral/ROW Users	M U
Elected Officials	E O	Economic Groups	E G
Grazing Lessees	G L	Other Parties	O P
Landowners/Users	L O	Other Landowners/Users outside ACEC	O L

APPENDIX V

PUBLIC MEETING ATTENDANCE LIST

April 4, 1991
ACEC Meeting Attendance
Casper District

Name	Mailing Address
R. L. McCall	3008 East 12th St., Casper, WY 82609
Tom Easterly	112½ S. Cedar, Casper, WY 82601
Lucy Rognstad	2426 South Poplar Street, Casper, WY 82602
Bob Montgomery	P. O. Box 2102, Casper, WY 82602
Jean Perry	Box 2371, Casper, WY 82602
Pete Perry	Box 2371, Casper, WY 82602
Sue Cole	246 S. Washington, Casper, WY 82601
Gene Fowler	10497 Goose Egg Road, Casper, WY 82604
Mike Choma	2003 S. Poplar St., Casper, WY 82601
Lois Layton	P. O. Box 2851, Casper, WY 82602
P. S. Bishop	1173 Granada, Casper, WY 82601
Susan O'Neill	Casper Mountain Road Box 55, Casper, WY 82601
Forrest Skretteberg	1203 L.A. Lane, Gillette, WY 82716
John Fanto	501 Trigood, Casper, WY 82601
Cherie Burd, Senator Simpson's Office	3201 Federal Building, Casper, WY 82601
Bill A. Street	2665 East 6th, Casper, WY 82609
Elmer N. Johnston	234 West 1st, Casper, WY 82601
Rodney & Laura Stalkup	5120 Alcova Route, Casper, WY 82604
Jim Nall	5810 Bates Creek Route, Casper, WY 82604
Carol Leffler, Cong. Craig Thomas Off	4003 Federal Building, Casper, WY 82601
Tracy J. Lamont	3581 E. 19th, Casper, WY 82609
Dianne M. Berrigan, Goverment Affairs Chairman, Wyoming Association of Professional Archeologists	P. O. Box 2108, Casper, WY 82602
Steve Gnagy	5120 Alcova Route Box 10, Casper, WY 82604
Cathy Killean	5138 Alcova No. 3, Casper, WY 82604
Bill Snodgrass	5120 Alcova Rt. No. 21, Casper, WY 82604
William McMurry	1455 S. Ash, Casper, WY 82601
Randy Webb	3300 Coffman, Casper, WY 82604
Gail Zimmerman	2361 Trojan Drive, Casper, WY 82609
Barry J. Horn	3324 Aspen Drive, Casper, WY 82601
Frank & Lois Layton	Box 2851, Casper, WY 82602
Joe & Georgia Phipps	6141 Raderville Rt., Casper, WY 82604
Minell & Kelly Weikum	6135 Raderville Rt., Casper, WY 82604
C. Rose	5120 Alcova Rt., Casper, WY 82604
Jeff Gosman	139 W. 2nd St. Ste. 1A, Casper, WY 82601
Tami & Ernie Skretteberg	109 N. Colorado, Casper, WY 82609
Bill Dryer	2465 Larkspur, Casper, WY 82604
Kelly Glause	Box 797, Evansville, WY 82636
Darlene Bishop	1173 Granada, Casper, WY 82604
Carlton Belz	1742 Westridge Cir., Casper, WY 82604
Susan Anderson	1228 South Ash, Casper, WY 82601
Dan Theile	2848 Coffman Ave., Casper, WY 82604

APPENDIX V

Name	Mailing Address
Tim Monroe	BLM
James E. Forsling	5120 Alcova Rt. Box 2, Casper, WY 82604
Stan McInroy	5120 Alcova Rt. Box 401, Casper, WY 82604
Oliver Scott	5120 Alcova Rt. Box 16, Casper, WY 82604
Walt Merschat	732 S. Grant, Casper, WY 82601
Don Rissler	246 S. Center, Casper, WY 82601
Roy Larsen	1720 S. Melrose, Casper, WY 82601
Sam Weaver	4621 CY, Casper, WY 82604
John Gillham	Box 613, Mills, WY 82644
Susan Mullen	P. O. Box 2915, Casper, WY 82602
Opal McInroy	5120 Alcova Rt. Box 401, Casper, WY 82604
Bob Sawin	P. O. Box 1101, Casper, WY 82602
Bart Rea	5200 Yesness Lane, Casper, WY 82604
Liz Rea	5200 Yesness Lane, Casper, WY 82604
Vic McMurry	1700 W. Lincolnway No. 173, Cheyenne, WY 82003
Hugh Jackson	Casper Star-Tribune
Del Holz - USBR	P. O. Box 1630, Mills, WY 82644
Peggy Peterson	3519 Partridge Lane, Casper, WY 82604
James W. O'Neil	Casper Mtn. Route Box 55, Casper, WY 82601

APPENDIX W

PUBLIC MEETING NEWS RELEASE

Bureau of Land Management
1701 East E Street
Casper, WY 82601

BLM NEWS

DATE: March 21, 1991

CONTACT: Kate DuPont
261-7600

BLM ASKING FOR PUBLIC INPUT ON JACKSON CANYON

CASPER: The Bureau of Land Management is asking the public to help identify potential conflicts with management of bald eagle habitat in Jackson Canyon as well as other roosting and nesting sites near Casper. A meeting is set for April 4, beginning at 7:00 p.m. at the BLM's Casper District Office, 1701 East "E" Street.

Jackson Canyon, located nine miles southwest of Casper, was designated an area of critical environmental concern (ACEC) by the BLM in their 1985 resource management plan. This ten year plan is used as a guide for all land use management decision within the Platte River Resource Area including the restriction of any action not compatible with the protection of bald eagle habitat in the area.

"During the past of couple years, increased interest in mining limestone, winter recreational use of the area, residential development, timber harvesting, road improvements and other activities both within and outside the boundary of the ACEC, have prompted BLM to seek public input before developing a habitat management plan," explained Platte River Resource Area Manager Bill Mortimer.

A habitat management plan is a site specific activity plan, and is required by the 1985 resource management plan. An HMP defines in more detail the management actions BLM must take to be in compliance with numerous laws, including the Threatened and Endangered Species Act.

"The HMP will identify specific actions that are needed to protect the habitat while not abandoning the agency's multiple use land management objectives. I want to make sure the public's concerns are considered before developing the HMP," Mortimer said.

During the past few weeks, BLM has met with a number of individuals to gather information on potential development that could affect the future of bald eagle habitat. Much of the land within the ACEC boundary is privately or state owned and the BLM does not have jurisdiction over the use of those lands.

The issues and concerns, and information presented during the scoping meetings will be summarized at the public meeting. The public is invited to comment and assist the BLM in identifying situations that need to be considered in the of the habitat management plan. The BLM will not begin to prepare the HMP until after the meeting. It should be completed by September.

(END)

APPENDIX X

LETTER REQUESTING COMMENTS FROM LAND USERS AND MAILING LIST

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
PLATTE RIVER RESOURCE AREA
P.O. DRAWER 2420
MILLS, WYOMING 82644

6780
Jackson Canyon
ACEC HMP

MAR 22 1991

Dear Land Owner/Land User:

The Bureau of Land Management, Platte River Resource Area has begun preparation of a Habitat Management Plan (HMP) for known bald eagle habitat areas in Natrona, Converse and Goshen Counties. These bald eagle roosts and nesting habitat areas are shown on the enclosed map.

The areas shown on the map contain significant wildlife habitat for bald and golden eagles which are protected by the Endangered Species Act and the Bald Eagle Protection Act. Many of these areas have been identified since the Platte River Resource Area Resource Management Plan (RMP) was completed in 1985.

You may note that some of the habitat areas are located on privately owned surface. However, the mineral estate is reserved to the United States and is administered by the BLM. BLM has a responsibility under the laws to ensure that any Federal action authorized, funded, or carried out is not likely to jeopardize the continued existence of the bald eagle or result in destruction or adverse modification of critical habitat. The BLM is directed to maintain and improve the bald eagle habitat on public lands in coordination with the U.S. Fish and Wildlife Service and the Wyoming Game & Fish Department.

An HMP is a site specific activity plan for a geographic area of public lands which identifies wildlife habitat management actions to be implemented in achieving specific objectives related to Resource Management Plan (the BLM's land use plan) decisions.

The purpose is to manage habitats on the public lands for the conservation and rehabilitation of fish, wildlife, and plant resources consistent with multiple-use management principles. To meet this objective it is necessary to promote the development and implementation of HMPs for the conservation of sensitive, threatened, and endangered (T&E) animals officially listed by Federal or State agencies. The bald eagle is listed as a T&E species.

The HMP will identify what types of human activities impact bald eagles and what that impact is, and will also evaluate the cumulative effects of BLM actions in the area. A comprehensive approach to management of areas of important bald eagle habitat will be the end result.

The HMP is scheduled to be completed by October 1991. BLM will then begin implementation of the actions determined to be appropriate for the habitat areas. After the HMP has been approved and implementation is underway, regular followup monitoring will be performed.

We are currently in the "scoping" phase of HMP preparation, and have not yet written the document. During scoping, BLM is contacting parties with interests in the habitat areas to identify the issues and concerns those parties may have about management of those areas. We look forward to hearing your concerns about management of the bald and golden eagle habitat areas, and would appreciate any pertinent information you may want to provide us.

Your written comments will be considered during HMP preparation, and will be included in the official HMP records. Please submit any written comments by May 1, 1991 to the above address. If you have any questions, please contact Celia Skillman of my staff at (307) 261-7519.

Sincerely,

William H Mortimer

Platte River Resource Area Manager

Enclosure

APPENDIX X

IDENTICAL LETTER SENT TO THESE PARTIES

Garrett Ranch Company
Box 5846 Bates Creek RT
Casper, WY 82644

Schnoor Land and Livestock
Box 5815
Casper, WY 82604

J. R. Bixby
P. O. Box 38
Glenrock, WY 82637

Duncan Ranches, Inc.
c/o Hugh Duncan
Boxelder RT
Glenrock, WY 82637

Green Valley, Inc.
c/o William E. Barber
71 Barber Road, RT 1
Douglas, WY 82633

Basil C. Bradbury
P. O. Box 1900
Glenrock, WY 82637

True Ranches
c/o David True
P. O. Drawer 2360
Casper, WY 82602

Nancy Bixby Hudson
926 Hobson
Lander, WY 82520

Faye Hale
976 Box Elder Road
Glenrock, WY 82637

Ed Heiser
P.O. Box 342
Glenrock, WY 82637

Mary Jane Strand
5816 Bates Creek RT
Casper, WY 82604

Parkerton Ranch Company
c/o Jon Nicolaysen
140 North Center
Casper, WY 82601

B. B. Brooks Company
c/o H.E. Stuckenhoff
Box 1050
Casper, WY 82602

Boner Brothers Partnership
c/o Bob Boner
Box 66
Glenrock, WY 82637

Robert Keenan
Box 366
Glenrock, WY 82637

John E. Pierce
P. O. Box 3173
Casper, WY 82602

Eleanor O'Brien
2721 Saratoga Road
Casper, WY 82604

Jack McDaniels
14700 Evansville RT
Box 1
Evansville, WY 82636

Glen Q. Burris
29423 Pebble Beach Drive
Sun City, CA 92381

John G. Arnold
P. O. Box 419038
Kansas City, MO 64183

Larry Byer
14700 Evansville Road
Box 2
Evansville, WY 82636

Wesley Childers
Strohecker Ranch Company
6220 Raderville RT
Casper, WY 82604

Pine Mountain Ranch
c/o C. Putman
P.O. Box 2020
Mills, WY 82644

Clarice Manning
Box 85
Natrona, WY 82646

TCM Inc.
c/o J.B. Eccles Jr.
Box 2147
Casper, WY 82602

Evelyn Cummings
2111 Trojan Drive
Casper, WY 82601

William Henry
1320 Nottingham Drive
Casper, WY 82609

Peabody Coal Company
301 North Memorial Drive
St. Louis, MO 63102

Nachtman Land and Livestock, Inc.
c/o Lona Nachtman
2556 Dull Center Road
Douglas, WY 82633

55 Ranch
c/o Rhea Tillard
Box 58
Douglas, WY 82633

Patterson Ranch
c/o Joe Patterson
2421 Ross Route
Douglas, WY 82633

Edward Moore
Douglas, WY 82633

Metropolitan Farm & Ranch Properties, Inc.
c/o Farmers National Company
Box 80105
Billings, MT 59108

Frank Shepperson
Box 189
Midwest, WY 82643

Staple Three Sheep Company
c/o Buck Allemand
Box 388
Midwest, WY 82643

Howard Farms
c/o Bud Howard
P.O. Box 825
Casper, WY 82602

Coffman Ranch Co.
c/o Lee Coffman
908 South Durbin St.
Casper, WY 82601

Morel Livestock Inc.
119 Harvard Drive
Gillette, WY 82716

W6:CSkillman:cls:WANG:1977s:03/22/91:Final

APPENDIX X

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
PLATTE RIVER RESOURCE AREA
P.O. DRAWER 2420
MILLS, WYOMING 82644

6780
Jackson Canyon
ACEC HMP

APR 24 1991

Dear Oil and Gas Lessee:

The Bureau of Land Management, Platte River Resource Area, has begun preparation of a Habitat Management Plan (HMP) for bald eagle habitat areas in Natrona, Converse, Platte, and Goshen Counties. Bald eagle roosts and nesting habitat areas are shown on the enclosed map. The HMP will also include bald eagle roosts in the Jackson Canyon Area of Critical Environmental Concern; feeding concentration areas along the North Platte River; and, feeding habitat on rangelands in the counties named above. Our review of the records indicates that you hold an oil and gas lease (or an interest in an oil and gas lease) on some of the bald and golden eagle habitat lands to be included in the HMP.

An HMP is a site specific activity plan for a geographic area of public lands which identifies wildlife habitat management actions to be implemented in achieving specific objectives related to RMP decisions. The purpose is to manage habitats on the public lands for the conservation and rehabilitation of fish, wildlife, and plant resources consistent with multiple-use management principles. To meet this objective it is necessary to promote the development and implementation of HMPs for the conservation of sensitive, threatened, and endangered (T&E) animals officially listed by Federal or State agencies. The bald eagle is listed as a T&E species.

The areas shown on the enclosed map contain significant wildlife habitat for bald and golden eagles which are protected by the Endangered Species Act and the Bald Eagle Protection Act. Many of these areas have been identified since the Platte River Resource Area Resource Management Plan (RMP), the BLM's land use plan, was completed in 1985.

You may note that some of the habitat areas are located on privately owned surface. However, where the mineral estate is reserved to the United States, it is administered by BLM. BLM has a responsibility under the laws to ensure that any Federal action authorized, funded, or carried out is not likely to jeopardize the continued existence of the bald eagle or result in destruction or adverse modification of critical habitat. The BLM is directed to maintain and improve the bald eagle habitat on public lands in coordination with the U.S. Fish and Wildlife Service and the Wyoming Game & Fish Department.

BLM's primary management action on private surface/federal mineral lands is the application of oil and gas lease stipulations. RMP decisions state that oil and gas lease development activities are subject to a "No Surface Occupancy" stipulation within a certain distance of bald eagle nests. Those activities are also subject to a "No Surface Disturbing Activity" stipulation within a certain distance of nests during the nesting period (from February 1 through August 15); and within a certain distance of roosts during the roosting period (November 1 through March 31). By development of an HMP, we will be able to determine appropriate distances for application of these stipulations.

The HMP will identify what types of human activities impact bald eagles and what that impact is, and will also evaluate the cumulative effects of BLM actions in the area. A comprehensive approach to management of areas of important bald eagle habitat will be the end result.

The HMP is scheduled to be completed by October 1991. BLM will then begin implementation of the actions determined to be appropriate for the habitat areas. After the HMP has been approved and implementation is underway, regular follow up monitoring will be performed.

We are currently in the "scoping" phase of HMP preparation, and have not yet written the document. During scoping, BLM is contacting parties with interests in the habitat areas to identify the issues and concerns those parties may have about management of those areas. At scoping meetings, we provided information packets which we hope have been helpful in answering the most commonly asked questions. The informational packet is enclosed.

We look forward to hearing your concerns about management of the bald and golden eagle habitat areas, and would appreciate any pertinent information you may want to provide us. The public comment period ends May 1, 1991. However, since we have just recently identified affected oil and gas lessees, and this may be your first notification, we realize this leaves you a rather short period in which to comment. Therefore, we ask that your comments be submitted by May 15, 1991 to the above address.

Your written comments will be considered during HMP preparation, and will be included in the official HMP records. A copy of this letter is being sent to the County Commissioners for each of the above listed counties, as well as to the Forest Supervisor, Medicine Bow National Forest. If you have any questions, please contact Celia Skillman of my staff at (307) 261-7519.

Sincerely,

William H Mortimer

Platte River Resource Area Manager

Enclosures

IDENTICAL LETTER TO THOSE ON ATTACHED LIST

APPENDIX X
OIL AND GAS MAILING LIST

General Atlantic Resource 410 17th Street, No. 1400 Denver, CO 80202	WYW74579, WYW87457, WYW74580
Prairie Petroleum of Colorado 910 16th Street, No. 610 Denver, CO 80202	WYW100718
Hixon Development Company Box 2810 Farmington, NM 87499	WYW120712
Elzalene J. Sullivan Box 1001 Ft. Lauderdale, FL 33302	WYW105950
J. A. Brohman Box 215 Chetek, WI 54728	WYW103294
Robert E. Becker Box 341 Seahurst, WA 98062	WYW103896 (100.00000%)
Equitable Resource Energy Company Box 21017 Billings, MT 59104	WYW103896 (0.00000%)
Melvin Wolf Box 2062 Denver, CO 80201	WYW112624
Byron W. Hughes 101 Spencer Cove Clinton, MS 39056	WYW108599
TXO Production Corporation Fidelity Union Tower Dallas, TX 75201	WYW0324721 (20.85900%)
Pacific Enterprises Oil Company 1700 Pacific Avenue, No. 1200 Dallas, TX 75201-4697	WYW0324721 (48.67100%)
Manning Oil Partners 370 17th Street, No. 3650 Denver, Co 80202	WYW0324721 (30.47000%)
William E. Jeffers, Jr. Box 123 Artesia, NM 88210	WYW96940

B&P Investments Box 1718 Fort Worth, TX 76101	WYW113818 (50.00000%)
Carnoustie JNT VNTR Box 1718 Fort Worth, TX 76101	WYW113818 (50.00000%) WYW113261 (50.00000%)
Amer Equity Partners Box 344 Greensbord, GA 30642	WYW104589
Wayne K. Weaver 156 Valley Drive Casper, WY 82601	WYW019621 (33.33000%) WYW0220510 (33.33000%) WYW41244 (0.00000%)
Hawks Company Ltd. Partnership Box 2493 Casper, WY 82602	WYW019621 (66.67000%) WYW0220510 (66.67000%)
Viable Resources Inc. Box 3192 Casper, WY 82602	WYW019621 (0.00000%) WYW0220510 (0.00000%)
Marathon Oil Company Box 3128 Houston, TX 77253	WYW019621 (0.00000%) WYW0220510 (0.00000%) WYW41244 (50.00000%)
Marathon Oil Company Box 3128 Houston, TX 77253	WYW41244 (50.00000%), WYW80712 (50.00000%) WYW72133 (50.00000%) WYW80711 (0.00000%)
Amerada Hess Corporation 1200 Milam Entex Houston, TX 77002-5681	WYW72133 (50.00000%) WYW80711 (100.00000%) WYW80712 (50.00000%)
Sophie Kaminski 22 Archung Road Wayne, NJ 07470	WYW84812
Prenalta Corporation Box 2514 Casper, WY 82602	WYW102502 (50.00000%) WYW116604 (50.00000%)
Spelpren Company Box 2514 Casper, WY 82602	WYW102502 (50.00000%) WYW116604 (50.00000%)
Louis A. Walstrom, Jr. Box 3120 Seal Beach, CA 90740-2120	WYW102503
Marsland B. Moncrief 9th and Commerce Fort Worth, TX 76102	WYW106007

WGR Incorporated 10701 Melody Drive, No. 609 Denver, CO 80234-4123	WYW112419, WYW112420
B&P Investments Box 1718 Fort Worth, TX 76101	WYW113261 (50.00000%)
ABO Petroleum Corporation 105 S. 4th Street Artesia, NM 88210	WYW113839 (33.33000%), WYW116098 (33.33333%) WYW114728 (33.33333%) WYW114728 (33.33333%)
Myco Industries Inc. 105 S. 4th Street Artesia, NM 88210	WYW113839 (33.33000%), WYW116098 (33.33333%) WYW114728 (33.33333%) WYW114728 (33.33333%)
Yates Drilling Company 105 S. 4th Street Artesia, NM 88210	WYW113839 (33.34000%), WYW105285 (25.00000%) WYW114728 (33.33334%), WYW116098 (33.33334%) WYW114728 (33.33334%)
Erving Wolf 1001 Fannin, No. 2000 Houston, TX 77002-6709	WYW115447, WYW120739, WYW120743 WYW118803 (50.00000%)
Joyce Wolf 1001 Fannin, No. 2000 Houston, TX 77002-6709	WYW115448 WYW117329 (50.00000%)
Mathew Wolf 1001 Fannin, No. 2000 Houston, TX 77002-6709	WYW122271 (50.00000%)
Jane E. Chorney 555 17th Street, No. 1000 Denver, CO 80202	WYW122271 (50.00000%)
Chester L. Pringle Box 848 Marble Falls, TX 78654	WYW84289
Santa Fe Energy Company 1 W. 3rd Street, No. 500 Tulsa, OK 74103-3508	WYW95850
Cabot Exploration Corporation Box 4544 Houston, TX 77210-4544	WYW115974, WYW117745
High Plains Energy Company 1600 Broadway, No. 1565 Denver, CO 80202	WYW114310
Joyce L. Carlson Box 702 Cheyenne, WY 82003	WYW121758

Raymond Chorney 555 17th Street, No. 1000 Denver, CO 80202	WYW118803 (50.00000%)
Unit Petroleum Company Box 702500 Tulsa, OK 74170	WYW114506 (25.00000%)
John C. Oxley 1 W. 3rd Street, No. 1300 Tulsa, OK 74103	WYW114506 (25.00000%)
Dyco Petroleum Corporation 7130 S. Lewis, No. 300 Tulsa, OK 74134	WYW114506 (50.00000%)
Maurice W. Brown 614 S. Greeley Highway Cheyenne, WY 82007-1855	WYW120477, WYW120478, WYW112926, WYW115394
Louisiana Land and Exploration 1560 Broadway, No. 1200 Denver, CO 80202	WYW111798 (33.34000%) WYW108994 (33.34000%)
Woods Petroleum Corporation 3817 NW Expressway, No. 700 Oklahoma City, OK 73112	WYW111798 (33.33000%) WYW108994 (33.33000%)
W. A. Moncrief, Jr. 9th At Commerce Ft. Worth, TX 76102	WYW111798 (33.33000%), WYW82916 (65.00000%) WYW108994 (33.33000%), WYW91198 (65.00000%) WYW83565 (65.00000%), WYW98861 (65.00000%) WYW72065 (0.00000%), WYW36195 (12.50000%) WYW100659 (65.00000%), WYW87358 (50.00000%)
Gary Luning 44 Iverness Drive ED Englewood, CO 80112	WYW116420
Sun Operating Ltd. Partnership Box 2880 Dallas, TX 75221	WYW114604, WYW112962
Phillips Petroleum Company Box 1967 Houston, TX 77251-1967	WYW112367, WYW120463, WYW36195 (0.00000%)
John P. Ellbogen Box 1928 Casper, WY 82602	WYW83565 (8.75000%), WYW98861 (8.75000%) WYW82916 (8.75000%), WYW100659 (8.75000%) WYW91198 (8.75000%)
Apache Corporation 1700 Lincoln, No. 1900 Denver, CO 80203-4519	WYW83565 (17.50000%), WYW98861 (17.50000%) WYW82916 (17.50000%), WYW100659 (17.50000%) WYW91198 (17.50000%)
Tyrex Oil Company Box 2459 Casper, WY 82602	WYW83565 (8.75000%), WYW98861 (8.75000%) WYW82916 (8.75000%), WYW100659 (8.75000%) WYW91198 (8.75000%)

Phillips Petroleum Company 8055 E. Tufts Avenue Parkway Denver, CO 80237-2898	WYW83565 (0.00000%), WYW108199 (50.00000%) WYW82916 (0.00000%), WYW91194 (47.50000 WYW114295 (100.00000%)
Phillips Petroleum Company Box 1867 Houston, TX 77251	WYW117162
APC Operating Partnership, LP 1700 Lincoln, No. 1900 Denver, CO 80203-4519	WYW82916 (0.00000%)
Phillips Petroleum Company 152 N. Durbin Casper, WY 82601	WYW114295 (0.00000%)
Lancaster Corporation Box 8439 Denver, CO 80201-8439	WYW105285 (25.00000%) WYW117329 (50.00000%)
Maxus Exploration Company 717 N. Harwood Street Dallas, TX 75201	WYW105285 (25.00000%) WYW36195 (25.00000%)
Anderman/Smith and Company 1776 Lincoln, No. 500 Amarillo, TX 79188	WYW105285 (25.00000%)
ANR Production Company Box 749 Denver, CO 80201	WYW108199 (50.00000%) WYW91194 (47.50000%)
Dalport Oil Corporation 1401 Elm Street, No. 3471 Dallas, TX 75202	WYW123239
Enron Oil and Gas Company 1801 California, No. 3400 Denver, CO 80202	WYW72065 (100.00000%)
Joan Chorney 555 17th Street, No. 1000 Denver, CO 80202-3910	WYW36195 (25.00000%)
Argent Energy Inc. 3817 NW Expressway, No. 700 Oklahoma City, OK 73112	WYW36195 (12.50000%)
Arthur M. Guida 410 17th Street, No. 880 Denver, CO 80202	WYW36195 (0.00000%)
Mobile Oil Corporation 410 17th Street, No. 880 Denver, CO 80202	WYW36195 (0.00000%)

Aztec G&O Corporation 333 N. Rancho Road Las Vegas, NV 89106	WYW36195 (0.00000%)
Texaco Producing Incorporated Box 2100 Denver, CO 80201	WYW36195 (25.00000%)
Amoco Western Company Box 800 Denver, CO 80201	WYW36195 (0.00000%)
Charles Sherwood 533 Baarson Helena, MT 59601	WYW36195 (0.00000%)
Jirst Ltd. Partnership Box 769 Douglas, WY 82633	WYW36195 (0.00000%)
Samedan Oil Corporation 1660 Lincoln, No. 3000 Denver, CO 80264	WYW36195 (0.00000%)
Amoco Production Company 1660 Lincoln, No. 3000 Denver, CO 80264	WYW36195 (0.00000%)
Kerr-McGee Corporation Box 25861 Oklahoma City, OK 73125	WYW36195 (0.00000%)
Sonat Exploration Company 3817 NW Expressway, No. 700 Oklahoma City, OK 73112	WYW36195 (0.00000%) WYW87358 (25.00000%)
Northwestern Mutual 720 E. Wisconsin Ave. Milwaukee, WI 53202	WYW84805 (10.52632%) WYW91199 (10.52632%)
Adobe Resources Corporation Box 4512 Houston, TX 77210	WYW84805 (18.94737%) WYW91199 (18.94737%)
Conquest/P 82 Ltd. Box 4512 Houston, TX 77210	WYW84805 (5.15708%) WYW80574 (5.15708%) WYW91199 (5.15708%)
Conquest Exploration Company Box 4512 Houston, TX 77210	WYW84805 (62.10308%) WYW80574 (62.10308%) WYW91199 (62.10308%)
Conquest/N 82 Ltd. Box 4512 Houston, TX 77210	WYW84805 (3.26615%) WYW80574 (3.26615%) WYW91199 (3.26615%)

Madison Resource Inc. 885 2nd Avenue New York, NY 10017	WYW80574 (18.94737%)
Robert E. Johnson 9 Clinton Ct. S. Palm Coast, FL 32037	WYW91194 (5.00000%)
Double Oil and Gas Inc. 55 Broad Street, 7th Floor New York, NY 10004	WYW91194 (0.00000%)
Presidio Exploration Inc. 5613 DTC Parkway, No. 750 Englewood, CO 80111-3035	WYW87358 (25.00000%)
Club Oil and Gas Ltd. 600 17th Street, No. 2300 Denver, CO 80202	WYW121234, WYW114385
William S. Wilkerson Box 157 Hickory Grove, SC 29717	WYW111025
Rutter Enterprises Box 3186 Midland, TX 79702	WYW107709
Anadarko Petroleum Company Box 1330 Houston, TX 77251	WYW76340
Estelle H. Yates 104 S. 4th Street Artesia, NM 88210	WYW106786

R. K. Bitter, Manager, Lands and Contracts, U.S.
Marathon Oil Company
P. O. Box 3128
Houston, TX 77253

Gerald G. Heath, Forest Supervisor
Medicine Bow National Forest
605 Skyline Drive
Laramia, WY 82070-6003

John Pexton, Chairman
Converse County Commissioners
107 North 5th
Douglas, WY 82633

James G. Wilson, Chairman
Platte County Commissioners
County Courthouse
Wheatland, WY 82201

Chairman, Goshen County Commissioners
P. O. Box 160
Torrington, WY 82440

Jim Sandison, Chairman
Natrona County Commissioners
200 North Center, Suite 115
Casper, WY 82601

APPENDIX Y

LETTER NOTIFYING OF DRAFT HMP AVAILABILITY

MARCH 3, 1849

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Platte River Resource Area
P.O. Drawer 2420
Mills, Wyoming 82644

6780
JC ACEC HMP

NOV 4 1991

Dear Interested Citizen:

Thank you for your interest in the Bureau of Land Management, Platte River Resource Area's Bald Eagle Habitat Management Plan. The draft was released for public review November 4, 1991 with a deadline for comment set for December 4, 1991.

We appreciate the interest and the information received on the future management of the area and the public's interest in copies of the draft HMP. Unfortunately the printing cost prohibit us from providing all parties with a copy for review.

The 30 copies printed have been distributed to various public institutions, government offices, and special interest groups and we have asked those parties to make their copy available for public review.

The enclosed press release gives further information on the draft HMP. A list of parties receiving the draft HMP is also enclosed. Copies are also available at the BLM Platte River Resource Area, and at the BLM, Casper District Office, 1701 East "E" Street.

Again, thank you for input to the HMP, and for participating in preparation of the HMP. Please forward any comments to the Platte River Resource Area, P.O. Box 2420, Mills, WY 82644 by December 4, 1991.

Sincerely,

William H Mortimer

William H. Mortimer
Platte River Resource Area Manager

Enclosures
- News Release
- Draft HMP Distribution List

APPENDIX Z

PUBLIC NOTICE ADVERTISEMENT

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quickly denied by the team's owner Tuesday.

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with the Bucs.

Tampa Bay
verhouse on Tu[illegible] emphatical-
ly denied he or his representatives were interviewing Parcells.

"I categorically deny the story," says Culverhouse. "I have not spoken to Bill Parcells or his representatives and I have not authorized anyone to do so on behalf of the Buccaneers.

"I realize that when a team has a record such as ours that rumors will circulate. But as I have previ-

[illegible] to concentrate on a seven-game season.

They were 5-4 at that point and haven't lost since.

"I've said all along, that if we just took care of our own business, at the end, we'd be standing tall where we want to be," Shell said Monday. "And that still holds true."

Los Angeles beat Cincinnati

be ready for some duty, b
won't know that until the en
the week," Henning said.

Friesz, a second-year pro wh
had led the Chargers (3-9) to tw
straight victories, sprained his left ankle when he was sacked by Jets safety Erik McMillan in the second quarter of Sunday's game at East Rutherford, N.J.

Byrd, who leads the Chargers with six interceptions, sustained a stretched right Achilles' tendon on the Jets' first play from scrimmage.

• • •

There's an outside chance that outside linebacker Lawrence Taylor, suffering from a left knee injury, could play Sunday, New York Giants coach Ray Handley said.

Casper Star-Tribune 11-27-91

pplies for New Mexico football job

N.M. (AP)
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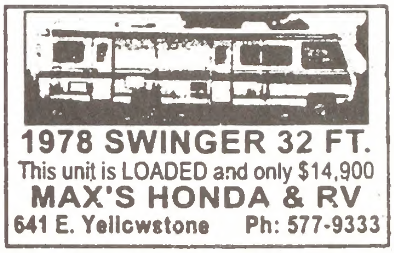
what I told him," Ness said. "But he's still in it."

Ness said he spoke with Rogers on Monday.

A 10-member advisory committee will review Rogers' resume today, Ness said. The decision on whether to interview him will be up to Ness.

Rogers recently finished the first season of a two-year contract to coach the Canadian Football League's Winnipeg Blue Bombers. He told The Albuquerque Tribune that leaving the Bombers would not be a problem.

"I'd be most happy to go in for an interview," Rogers said of New Mexico.



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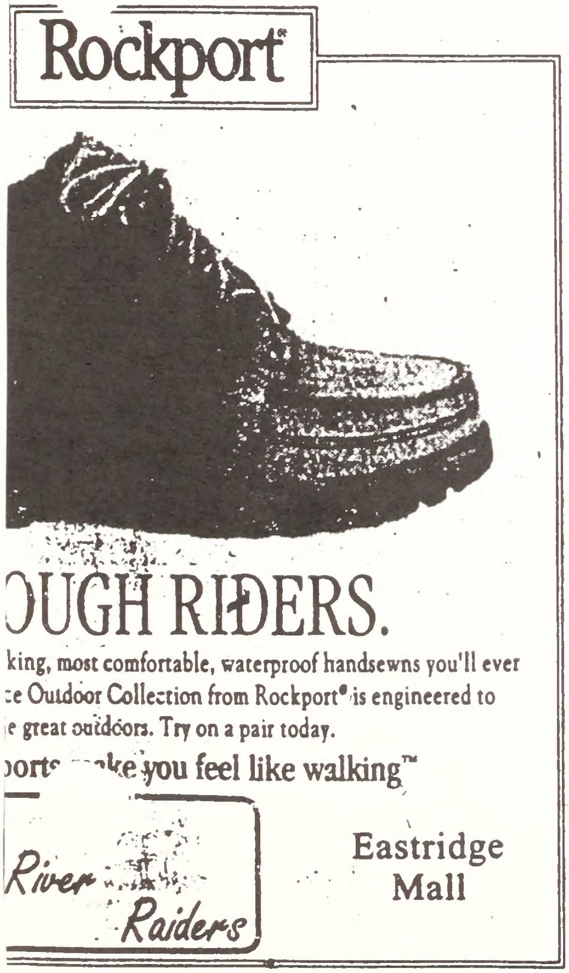
Public Notice

The Habitat Management Plan for the Bureau of Land Management Platte River Resource which considers the protection of bald eagles in Jackson Canyon and other parts of Natrona, Converse, Platte and Goshen counties has been released for public review.

The comment deadline is
December 4.
Mail comments to the
BLM,
Platte River Resource Area,
P.O. Box 2420
Mills, Wyoming 82644

The document is available at the following locations for public review. County libraries and county Commissioners in the counties of Natrona, Converse, Platte and Goshen; also at the Natrona County Planning, Parks, and Fire Department offices. Other locations include the Casper Mountain Fire District, Senators Malcom Wallop's, Al Simpson's and Congressman Craig Thomas's Casper Field offices; the State of Wyoming Forestry Division, Highway Department, and Land and Farm Loan Office. Copies have also been sent to the Murie Audubon Society, the Nature Conservancy, The Petroleum Association of Wyoming, Rocky Mountain Oil and Gas Associations, Sierra Club, and Rissler and McMurry Company. Cooperating agencies receiving copies are the U.S. Fish and Wildlife Service and the Wyoming Game and Fish Department. The HMP may also be reviewed at the BLM Casper District and Platte River Resource Area offices.



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NOTICE REGARDING SANITATION PICKUPS

The City Balefill and Sanitation Departments will be closed Thursday, November 28, 1991.

The Thursday sanitation collection route will be picked up on Saturday, November 30, 1991. Residents on Thursday's route should have their containers out for collection by 8:00 a.m. Saturday.

The Balefill and Sanitation Departments will also be closed December 25th, 1991 and January 1, 1992. Sanitation routes normally collected on these dates will be collected instead on Saturday, December 28, 1991 and Saturday, January 4, 1992. Residents should have their containers out for collection by 8:00 a.m. We are expecting larger volumes of trash due to the Holidays and therefore routes could run behind schedule. The residents should not retrieve their containers until they have been emptied.

THANK YOU FOR YOUR COOPERATION
City of Casper, Sanitation Department

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*U.S. GOVERNMENT PRINTING OFFICE 1992-0-673-071/64007

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DECISION RECORD

and

FINDING OF NO SIGNIFICANT IMPACT

Bald Eagle Habitat Management Plan

for the

Platte River Resource Area

and

Jackson Canyon Area of Critical Environmental Concern

Environmental Assessment No. WY-062-2-006

Completed May, 1992

by the BLM, Platte River Resource Area

DECISION RECORD and FINDING OF NO SIGNIFICANT IMPACT

DECISION

It is my decision to approve the Preferred Alternative identified in the "Planned Actions" section and analyzed in the "Environmental Consequences" section of the Bald Eagle Habitat Management Plan (HMP) for the Platte River Resource Area (PRRA) and Jackson Canyon Area of Critical Environmental Concern (ACEC), Environmental Assessment (EA) number WY-062-2-006. This decision incorporates by reference the final HMP and EA, dated May 1992.

Land use decisions and resource management unit (RMU) management prescriptions in the record of decision (ROD) for the PRRA Resource Management Plan (RMP) will need to be amended. The decisions that need to be amended are: F2 and RMU 8 as they relate to the allowable harvest values for Little Red Creek and Jackson Canyon; SD4 and RMU 8 for adjustment of the designated ACEC boundary; and, M4 to allocate mineral resources in bald eagle roosts outside the ACEC to withdrawal.

The actions selected by this decision are a combination of the alternatives presented in the "Planned Actions" section and analyzed in the "Environmental Consequences" section of the draft and final HMP and EA. The "Cumulative Impacts" section of the final HMP and EA considered the cumulative impacts of the Preferred Alternative, which is approved by this decision.

This decision is based on consideration of the resource issues defined in the draft and final HMP and EA; the environmental consequences of the alternatives; public comments received during scoping and on the draft HMP and EA; the results of consultations with the U.S. Fish and Wildlife Service (FWS) and Wyoming Game and Fish Department; and, the results of consultations with county and Wyoming state government, private industries, landowners, and public land user groups and individuals.

The HMP management actions hereby approved are described in Appendix A in the order addressed in the draft and final HMP and EA. Specific Bureau of Land Management (BLM) actions that will be necessary in order to implement this decision, and opportunities for affected parties to participate in implementation of the decision, are also identified.

Appendices B, C, and D contain flow charts that illustrate the organization of the approved HMP, and depict the steps and processes for implementation of the HMP. The flow charts are provided to show what actions BLM must take to implement the HMP, and to identify the opportunities for continued public involvement in management of bald eagle habitat on public lands in the PRRA.

Additional information on implementation, monitoring, and evaluation of the approved HMP actions is contained in the "Implementation, Monitoring, and Evaluation" section of this decision record.

In the interval between when the final HMP was forwarded for duplication and this decision was prepared, two errors were found in the final HMP. In the future, if major errors are found, an errata sheet will be provided to parties having a copy of the final HMP and EA. Corrections should be made as follows.

Page 23, Table 3: Change the Little Deer Creek roost acreage in column one to 146; in column three to 1,543; in column five to 146; and in column six to 1,543. Change column one total to 14,782; column three total to 39,590; column five total to 10,949; and column six total to 26,425. The error does not change any other tables or appendices, and it has no effect on the HMP decision or the rationale used to arrive at the decision.

Page 187, Table 7: In columns two and three (Cole Creek Roost and All Roosts), the "Other Minerals" sections should have two asterisks (**) to indicate that amendment of RMP decisions is required. This error appears only on this table; text in the HMP identifies that RMP amendment is needed.

FINDING OF NO SIGNIFICANT IMPACT

Based on the analysis of potential environmental impacts contained in the final HMP and EA, I have determined that impacts are not expected to be significant, and an environmental impact statement is not required.

RATIONALE FOR DECISION

Implementation of HMP recreation and access decisions for all bald eagle habitat areas should result in no increase from existing limitations on those uses. Potential limitations to or interference with private landowner rights should be avoided, and protection and enhancement of bald eagle habitat to meet BLM management objectives can be realized. Existing RMP decisions would be clarified, but there would be no increase from the current level of restrictions on public lands.

Exchanging BLM and state of Wyoming lands in the Jackson Canyon ACEC should improve BLM's ability for efficient, consistent management of public lands in the ACEC. Implementation would fulfill existing RMP decisions and meet HMP management objectives. With a more consolidated public land base in the ACEC, BLM could emphasize bald eagle and other wildlife habitat management. By consolidating state lands outside the ACEC, the state of Wyoming could realize more efficient management of state lands, and could maximize economic returns from those lands. Existing authorized uses on lands in the ACEC could continue without detrimental effects to users. During analysis of a specific exchange proposal, appraised values and Payment in Lieu of Taxes should be considered to determine if exchange would be in the public interest from the aspect of value.

Enlarging the southern Jackson Canyon ACEC boundary should provide an effective buffer to screen the sight and sound of activities conducted outside the ACEC from bald eagles inside the ACEC. This would also make approximately 15,000,000 cubic yards of mineral materials south of the ACEC available for development without occupancy restrictions. Negligible impacts to bald eagle populations or habitat, or to other land uses in the area are anticipated, and significant benefits to the state and local economy are possible.

Reduction of the eastern ACEC boundary would change no aspect of private property rights on the 914 acres of privately owned surface that would be removed from the ACEC. Oil and gas lease development restrictions on 818 acres of federal mineral estate would be reduced, and surface occupancy would be allowed. The archery range R&PP would be outside the ACEC, but there would be essentially no change from the uses currently allowed within the range.

Revision of the boundary would add 245 acres of public land to the Jackson Canyon ACEC, and those lands would be managed as part of the ACEC.

Removing the public land commercial timber base acreage from the PRRA allowable cut acreage base will eliminate obligations to meet an unattainable budget quota. There would still be opportunities to use timber sales or non-commercial harvests to achieve healthy timber stands and enhance bald eagle roost habitat.

Implementation of fire management decisions in all habitat areas provides the maximum protection of bald eagle habitat areas from destruction by wildfires. Under the provisions of fire management decisions, damage to habitat during wildfire suppression should be minimized, and the risk of wildfires getting out of control is reduced. Site-specific planning and analysis to weigh benefits versus possible impacts will be needed before prescribed burning is undertaken.

HMP decisions for management of federal mineral materials in bald eagle habitat areas in the PRRA would make 13,200 more acres of mineral estate available for development without seasonal or occupancy restrictions. Year-round no surface occupancy restrictions would remain in effect on approximately 26,400 acres of crucial roost habitat. RMP decisions pertaining to mineral materials in bald eagle habitat areas would be clarified. Continuing existing seasonal and occupancy restrictions on mineral material development on feeding habitat along the North Platte River, and allowing continued extraction on the specified 240 acres within ¼ mile of the river, should not increase the level of impacts or disturbances from those currently present. In the flyways, consideration on a case-by-case basis will ensure that bald eagles and their habitat is considered prior to BLM authorizing new disturbances on public lands. Impacts to industry or the public that may use federal mineral materials is anticipated to be minimal.

HMP decisions would make all federal mineral estate in bald eagle roosts, nests, and feeding habitat (approximately 37,100 acres) available for oil and gas leasing subject to year-round no surface occupancy stipulations. Existing leases in roosts, nests, and feeding habitat that do not contain the year-round occupancy stipulation would be considered on a case-by-case basis, and consultation with the FWS would be undertaken if necessary. Seasonal no surface occupancy stipulations currently applied to oil and gas lease development on approximately 13,600 acres of federal mineral estate would be eliminated. Federal mineral estate in bald eagle flyways would continue to be leased subject to site-specific resource stipulations. Leasing decisions represent the least acreage of public land, and the lowest level of restrictions necessary to protect bald eagles and their habitat. The possibility of a taking of eagles would be avoided, and multiple use and sustained yield on public lands containing bald eagle habitat is provided by making the oil and gas available for development.

Withdrawal of federal mineral estate in bald eagle roosts from appropriation under the General Mining Law of 1872 would make approximately 37,100 acres unavailable for location, development and patent. Approximately 13,200 acres of federal mineral estate previously included within roost boundaries would remain available for mining claim location. Unless withdrawn, direct and significant impacts to bald eagles could result; even if mitigation measures on claims were employed, remaining residual impacts could result. The significance of the roost habitat to bald eagle populations, and the reasonably foreseeable future claim development demonstrate that withdrawal is the most reasonable and prudent action for BLM to take to meet its responsibility under the Endangered Species Act. Where claims have been staked, examinations would be undertaken and the continuation of valid claims allowed to protect claimants rights. In these cases, compliance with the Endangered Species Act would minimize impacts to bald eagles and their habitat, although residual impacts could remain. Amendment of RMP locatable mineral decision M4, ROD p. 11, to include the bald eagle roost lands would fulfill the purpose of wildlife decision WL6, ROD p. 30.

The selected alternatives are not inconsistent with state and local government programs, plans, zoning, and applicable regulations. Implementation of the HMP will fulfill RMP decisions pertaining to management of the Jackson Canyon ACEC and other bald eagle habitat on public lands in the resource area. Some aspects of this decision make it necessary to amend the RMP approved in 1985 before implementation can occur (as identified in the "Decision" section of this Decision Record). Many RMP decisions are further clarified by this HMP decision. As required by RMP decisions, specific management guidance for bald eagle habitat on public lands in the resource area will be provided by the approved HMP.

The decision to select and implement the Preferred Alternative meets management objectives specified in the HMP. Public lands containing significant bald eagle and golden eagle habitat in the Platte River Resource Area will be managed for the continued protection and improvement of the habitat, and for the conservation and improvement of wildlife resources.

Selection of these alternatives is consistent with the Federal Land Policy and Management Act of 1976, as amended; the Endangered Species Act of 1973, as amended; the Bald Eagle Protection Act of 1940; the Migratory Bird Treaty Act of 1918; and, the associated regulations in titles 43 and 50 of the Code of Federal Regulations.

Implementation of this decision will make it possible for BLM to fulfill legislative mandates of the Endangered Species Act by protecting the habitat and population of bald eagles using public land in the Platte River Resource Area. Implementation of this decision will also fulfill the mandates of the Federal Land Policy and Management Act by providing multiple use and sustained yield of the other resource values present on the public lands.

Informal consultation with the FWS pursuant to Section 7 of the Endangered Species Act has been completed. The FWS has concurred that the final HMP and EA support my finding that the actions which may be taken under the Preferred Alternative are not likely to adversely affect the endangered bald eagles or their habitat. Formal consultation under the Endangered Species Act is not required to implement this decision, and consultation under the act, and compliance with section 7 of the act has been accomplished.

IMPLEMENTATION, MONITORING, AND EVALUATION

The Platte River Resource Area and the Casper District BLM are responsible for implementation and monitoring of the HMP. Implementation of the HMP is necessarily subject to the availability of funding and personnel and to changes in priorities. New policy changes that may occur will be incorporated into the HMP. New issues requiring resolution will be addressed through site-specific analysis or deferred until the Platte River Resource Area RMP is revised.

If any changes in actions which are not within the scope of the HMP and EA are proposed, or if the HMP is proposed to be modified in a manner that may result in an effect to listed species, or if any other endangered or threatened species are observed in the bald eagle habitat areas, further review pursuant to the National Environmental Policy Act of 1969, the Endangered Species Act, and associated resource program requirements, if any, will be necessary.

Implementation of the approved HMP is subject to concurrent implementation of actions specified in the Evaluation and Monitoring, HMP Progress Report (appendix E of this decision), and in the "Public Affairs" section of the final HMP and EA. Consultation and coordination between BLM and the FWS and the Wyoming Game and Fish Department will continue as outlined in the final HMP, and in accordance with existing memoranda of understanding and agreement.

William H Mortimer

William H Mortimer
Platte River Resource Area Manager

June 19, 1992
Date

APPENDIX A

Approved
Bald Eagle Habitat Management Plan (HMP) for the Platte River Resource Area (PRRA) and Jackson Canyon Area of Critical Environmental Concern (ACEC)

JACKSON CANYON ACEC

Recreation

Off road vehicle (ORV) travel in the ACEC will be limited to designated roads and vehicle routes on 3,890 acres of federal surface lands within the 14,000-acre ACEC boundary. Designated ORV routes are those which are clearly identified on the ground by signs (map 17 of the final HMP and EA). Use of the designated routes on federal lands by ORVs will not be allowed from November 1 through March 31, except when BLM determines (on a case-by-case basis) that administrative access is necessary for fire suppression or prescribed fire actions, or for control of pine beetle infestations, to maintain or improve bald eagle habitat. The ORV routes will be officially designated through publication in the Federal Register.

BLM Actions Required; Opportunities for Public Participation

* BLM publish ORV designation in the Federal Register.

* Public comment period (30 days).

* BLM install signs and barricades, and patrol and enforce the ORV designation.

Access

New authorizations for construction of new roads and other facilities on public lands (which may include private surface-federal mineral estate), and for improvement and maintenance of existing roads on public lands (which may include private surface-federal mineral estate), within or leading directly to the ACEC will not be issued, except as specified in the following paragraph.

A 60-foot wide road to the archery range on the public land now under R&PP lease to the Girl Scouts, proposed for construction by the Natrona County Parks Department, may be authorized by right-of-way. The 60-foot width should meet requirements under state law for subdivision access, and such right-of-way will allow year-round occupancy. Stipulations in the archery range R&PP development plan will prohibit winter vehicle access on public land beyond the archery range R&PP area.

BLM Actions Required; Opportunities for Public Participation

* Natrona County Parks Department submit a formal application for right-of-way, accompanied by a plan of development describing the

specific road design and outlining the construction, operation, maintenance, and reclamation activities proposed.

* PRRA BLM assess proposal.

* PRRA BLM issue a proposed right-of-way decision (30 days for protest by affected parties).

* Casper BLM District Manager makes decision on protest (30-day period for appeal). Decision adverse to the party filing the protest may be appealed to the Interior Board of Land Appeals (IBLA).

* If PRRA decision upheld by Casper District BLM, or if no protest filed, PRRA may issue a right-of-way.

* Road may be constructed while IBLA appeal is pending.

* IBLA's decision is the Department of Interior's final decision.

* Litigation in federal court may be undertaken.

Exchange

Exchange will be pursued to acquire all state of Wyoming lands within or adjacent to the ACEC; public lands located outside the ACEC area (to be identified by the state of Wyoming) would be disposed of by exchange to the state of Wyoming. Some of the state lands adjacent to the ACEC that were identified during preliminary BLM-state exchange negotiations are located in sections 2, 3, and 4 of T. 31 N., R. 80 W., and in sections 28 and 29 of T. 32 N., R. 80 W. This decision includes disposal by exchange to the state of Wyoming of public lands outside the ACEC boundary that contain limestone deposits (T. 32 N., R. 80 W., sections 27, 28 and 34). If limestone mining is proposed on the exchanged lands, those actions will be subject to access and blasting limitations from November 1 through March 31.

BLM Actions Required; Opportunities for Public Participation

* BLM and the state of Wyoming identify and reach agreement on specific lands the BLM and the state would like to acquire through exchange.

* Two-year notice of grazing lease termination provided to holders of grazing leases on public lands outside the ACEC. Lessees could waive the two-year period or protest the proposed lease cancellation, and protest the proposed exchange when that notice is published.

* Notice of Realty Action published in the Federal Register (45-day public comment period, and concurrent 60-day period allowed for the state of Wyoming, governor's consistency review).

* Proposed exchange may be protested by affected parties to the State Director, Wyoming BLM.

* The State Director's decision on the protest may be appealed to IBLA.

* IBLA's decision is the Department of Interior's final decision.

* Litigation in federal court may be undertaken.

Forestry

The acreage and volume identified for timber harvest within the ACEC, including the 163 acres of remaining commercial forest, will be removed from BLM's commercial base. Timber within the ACEC will not be harvested for commercial purposes, but will be actively managed. Silvicultural practices (thinning and mountain pine beetle management) will be implemented to achieve species diversity and to obtain healthy aged and structured stands for the benefit of bald eagle roosting habitat.

BLM Actions Required; Opportunities for Public Participation

* RMP land use decisions and RMU management prescriptions in the RMP ROD specific to this decision will require amendment, and include F2, ROD p. 12, and RMU 8, ROD p. 59. The applicable portion of land use decision F2 that will require amendment states: "The allowable cut will be about 6 million board feet (MMBF) through 1995. Little Red Creek, Jackson Canyon, and Muddy Mountain will have priority for timber harvest." The applicable portion of the RMU 8 management prescription that will require amendment states: "An active forestry management program will be carried out for this unit with a planned harvest of about 750 MBF per year for about five years to combat pine beetles."

* Proposed Notice of Plan Amendment signed by the State Director, Wyoming BLM, published in the Federal Register (45-day public comment period, and concurrent 60-day period allowed for the state of Wyoming, governor's consistency review).

* Proposed amendment may be protested by affected parties to the Director, BLM.

* The BLM Director's decision on a protest is the final BLM decision.

* If/when RMP is amended, 30-day period for appeal to IBLA.

* IBLA's decision is the Department of Interior's final decision.

* Litigation in federal court may be undertaken.

Fire Management

All federal lands within or adjacent to the ACEC will be designated priority full suppression zones. Priority full suppression may include full suppression of wildfires with all available resources, including vehicle use on existing roads and trails, air support, construction of roads, and grading of firebreaks using heavy equipment. Any surface disturbance resulting from suppression efforts will be restored and reclaimed immediately after the fire is suppressed. To the extent possible, trees will not be cut within 200 yards of the roosts during fire suppression.

The BLM will pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan may be established. That plan will be used for an escaped fire situation analysis plan when needed. These plans will include identification of areas where grading of roads and/or firebreaks are most needed for fire suppression, and will identify those areas where protection from wildfires is most critical. A draft initial attack plan will be completed by June 30, 1993. Prescribed burning will be implemented where necessary to meet range and timber resource management objectives, but it will not be allowed from November 1 through March 31.

BLM Actions Required; Opportunities for Public Participation

* BLM administrative action to update the BLM Casper District fire suppression plan.

* BLM coordinate with the Natrona County Parks Department, private landowners, and other fire and land management agencies to develop agreements and plans.

Mineral Materials

None of the Mineral Material alternatives identified in "Planned Actions" and analyzed in "Environmental Consequences" sections of the HMP and EA are selected. Analysis of potential impacts of limestone development without seasonal restrictions outside the ACEC revealed that the mineral material alternatives do not represent the lowest level of restriction necessary for BLM to meet its responsibility to protect the bald eagle habitat and populations in the ACEC.

BLM Actions Required; Opportunities for Public Participation

* Affected parties believing this decision is adverse to them have a 30-day period in which to appeal to IBLA.

* IBLA's decision is the Department of Interior's final decision.

* Litigation in federal court may be undertaken.

ACEC Boundary Adjustment

The existing ACEC boundary will be revised by enlarging it approximately ¼ mile to the south, making use of topographical features to screen bald eagle roosts (map 18 of the final HMP and EA). Mineral materials located outside the revised ACEC boundary will be available for development to extract limestone or other salable minerals without seasonal or occupancy restrictions. Those lands will be subject to access and blasting limitations from November 1 through March 31.

In addition, the existing ACEC boundary in the eastern portion of the area will be revised by reducing it to the township line between Range 79 and 80 West, which will become the eastern ACEC boundary (map 18 of the final HMP and EA).

BLM Actions Required; Opportunities for Public Participation

* RMP land use decisions and RMU management prescriptions specific to this decision will require amendment, and include SD4, ROD p. 31, and RMU 8, ROD pp. 59-63.

* Proposed Notice of Plan Amendment signed by the BLM State Director published in the Federal Register (45-day public comment period, and concurrent 60-day period allowed for the state of Wyoming, governor's consistency review).

* Proposed amendment may be protested by affected parties to the Director, BLM.

* The BLM Director's decision on a protest is the final BLM decision.

* If/when RMP is amended, 30-day period for appeal to IBLA. RMP amendment constitutes formal revision of the ACEC boundary.

* IBLA's decision is the Department of Interior's final decision.

* Litigation in federal court may be undertaken.

Other Minerals

The existing federal mineral estate in the ACEC, and any additional mineral estate that may be acquired in the ACEC, will be withdrawn from location and appropriation under the mining laws. Development of existing oil and gas leases will be subject to no surface occupancy (which is a condition of the existing leases). All federal mineral estate in the ACEC will be available for oil and gas leasing, with any leases issued subject to a no surface occupancy stipulation.

BLM Actions Required; Opportunities for Public Participation

Locatable Minerals:

* Request for withdrawal of locatable minerals to BLM Director for transmittal (if approved by the Director) to the Secretary of the Interior.

* If approved by the Secretary, publish Notice of Proposed Withdrawal in Federal Register (lands are segregated for two years according to the notice).

* Ninety-day public comment period; one or more public meetings; written comments from the public requested.

* BLM perform validity examinations on mining claims, prepare reports, evaluate comments received, and forward to the BLM Director.

* If approved, BLM Director transmits to the Secretary of the Interior.

* If approved by the Secretary, a Public Land Order is published in the Federal Register (30-day comment period), and the lands are withdrawn according to the order.

Leasable Minerals:

* BLM offer unleased parcels for oil and gas leases under competitive bidding procedures subject to no surface occupancy stipulation (45-day protest period).

* If no protest, lease sale is held and leases are issued. If no bids, the parcels remain available for over the counter lease offers.

* Protests are made to the State Director, Wyoming BLM. The State Director's decision on the protest is BLM's final decision (30-day period for appeal to IBLA).

* IBLA's decision is the Department of Interior's final decision.

* Litigation in federal court may be undertaken.

OTHER RESOURCE AREA ROOSTS

The Cole Creek Roost is addressed separately for the resource values "Access, Recreation, and Other Land Uses" because there are decisions in the Platte River Resource Area Resource Management Plan (RMP) Record of Decision that are specific to the lands in this roost. Where "All Roosts" are identified, all roosts (except the Jackson Canyon ACEC) are addressed.

Access, Recreation, and Other Land Uses

Cole Creek Roost

The public lands in this roost will be available for disposal to entities that will manage the land to maintain the resource values present, in accordance with RMP decisions identifying the parcel as one of ten 'downstream' parcels available for disposal. Acquisition of lands or access easements will not be pursued. Neither legal nor improved road access would be provided to the North Platte River in this bald eagle roost.

BLM Actions Required; Opportunities for Public Participation

* PRRA take administrative maintenance action to clarify RMP land use decisions and RMU management prescriptions specific to this roost (L4, ROD p. 23, R1, ROD p. 24, and RMU 7, ROD pp. 54, 59).

* PRRA review proposals to acquire the lands as received.

* When a decision is made, PRRA would inform the proponent in writing how to initiate review of the decision (usually a decision which a party believes is adverse may be appealed to IBLA).

All Roosts

No new roads or other surface developments will be authorized in the bald eagle winter roosting areas. No disturbance to trees, or improvements of roads or legal access will be allowed except as needed for fire suppression or for bald eagle habitat improvement or maintenance. Habitat improvements or maintenance efforts will not be allowed from November 1 through March 31.

Continued use or improvement (i.e., upgrading) of existing roads in bald eagle roost areas from November 1 through March 31 will be analyzed on a case-by-case basis in accordance with the Endangered Species Act.

The road restrictions identified in the RMP for specific portions of the Pine Mountain East and Pine Mountain West roosts are not valid. All the lands identified on the Pine Mountain East and Pine Mountain West roosts maps (maps 8 and 9 of the final HMP and EA) are included in this decision.

BLM Actions Required; Opportunities for Public Participation

* Implement as public land use proposals are received.

* PRRA review proposals to upgrade existing facilities as received.

* When a decision is made, PRRA would inform the proponent in writing how to initiate review of the decision (usually a decision which a party believes is adverse may be appealed to IBLA).

Fire Management

All Roosts

All federal lands within or adjacent to roosts will be designated priority full suppression zones. Priority full suppression can include suppression of wildfires with all available resources, including vehicle use on existing roads and trails, air support, or construction of roads and grading of firebreaks using heavy equipment. To the extent possible, trees will not be cut within 200 yards of the roosts during fire suppression.

The BLM will pursue cooperative agreements with private landowners and other fire and land management agencies so that an initial attack plan may be established. That plan will be used for an escaped fire situation analysis plan when needed. These plans will include identification of areas where grading of roads and/or firebreaks are most needed for fire suppression, and will identify those areas where protection from wildfires is most critical. A draft initial attack plan will be completed by June 30, 1993. Prescribed burning will be implemented where necessary to meet range and timber resource management objectives, but it will not be allowed from November 1 through March 31.

BLM Actions Required; Opportunities for Public Participation

* BLM administrative action to update the BLM Casper District fire suppression plan.

* BLM coordinate with the Natrona County Parks Department, private landowners, and other fire and land management agencies to develop agreements and plans.

Minerals

All Roosts

All BLM-administered lands and mineral estate will remain open to oil and gas leasing and development subject to the stipulation that no surface occupancy or development within the roost areas will be allowed at any time. The no surface occupancy stipulation will apply to maintenance and operation of producing wells, and modifications to this limitation will not be approved. The no surface occupancy stipulation, unless currently a condition of an existing lease or authorization, does not apply to maintenance and operation of existing lease facilities. All BLM-administered lands and mineral estate in bald eagle roost areas will be withdrawn from location and appropriation under the mining laws. Mineral materials will not be available for disposal.

BLM Actions Required; Opportunities for Public Participation

Leasable Minerals:

* BLM offer unleased parcels for oil and gas leases under competitive bidding procedures subject to no surface occupancy stipulation (45-day protest period).

* If no protest, lease sale is held and leases are issued. If no bids, the parcels remain available for over the counter lease offers.

* Protests are made to the BLM State Director. The State Director's decision on the protest is BLM's final decision (30-day period for appeal to IBLA).

* IBLA's decision is the Department of Interior's final decision.

* Litigation in federal court may be undertaken.

Locatable Minerals:

* RMP land use decision M4, ROD p. 11 requires amendment; this decision is consistent with WL6, ROD p. 30. (Refer to the Jackson Canyon ACEC, Forestry or Boundary Adjustment decisions for the RMP amendment process.)

* Request for withdrawal of locatable minerals to BLM Director for transmittal (if approved by the Director) to the Secretary of the Interior.

* If approved by the Secretary, publish Notice of Proposed Withdrawal in Federal Register (lands are segregated for two years according to the notice).

* Ninety-day public comment period; one or more public meetings; written comments from the public requested.

* BLM perform validity examinations on mining claims, prepare reports, evaluate comments received, and forward to the BLM Director.

* If approved, BLM Director transmits to the Secretary of the Interior.

* If approved by the Secretary, a Public Land Order is published in the Federal Register (30-day comment period), and the lands are withdrawn according to the specifics of the order.

Salable Minerals:

* PRRA take administrative maintenance action to clarify RMP land use decisions and RMU management prescriptions specific to development of salable minerals in bald eagle roosts (M3, ROD p. 11, and WL6, ROD p. 30).

* Implement as mineral material use proposals are received.

* When a decision is made, PRRA would inform the proponent in writing how to initiate review of the decision (usually a decision which a party believes is adverse may be appealed to IBLA).

NESTS

On public lands, surface development will be prohibited on an area from ¼ to 1 mile of known or discovered nests. The specific distance and dimensions of the area on which surface development will be prohibited will be determined on a case-by-case basis after consultation with the FWS in accordance with the Endangered Species Act.

BLM Actions Required; Opportunities for Public Participation

* As land use proposals are received, BLM perform a site-specific analysis. Consultation with the FWS in accordance with the Endangered Species Act will be initiated if required.

FEEDING AREAS

North Platte River

The BLM will attempt to acquire riverfront land along the North Platte River upstream of Casper and dispose of BLM-administered lands along the North Platte River downstream of Casper. The downstream lands will be available for disposal to entities that will manage the land to maintain the resource values present.

Surface development will be prohibited within ¼ mile of the North Platte River on a year-round basis, except as specified in the following paragraph. This limitation will not apply to recreation or habitat improvement projects. In addition, mineral material or other surface development on specific parcels of land (Map 19 of the final HMP and EA) within ½ mile of the river will not be allowed from November 1 through March 31. Modifications to the seasonal limitation in any year may be approved in writing by the authorized officer. The seasonal limitation does not apply to maintenance and operation of existing or producing mineral facilities.

On approximately 240 acres of federal mineral estate located in the NE¼, and W½SE¼, of section 11, T. 31 N., R. 82 W., mineral material or other surface development will be allowed within ¼ mile of the North Platte River, subject to the restriction that no surface occupancy will be allowed from November 1 through March 31.

The BLM will improve bald eagle feeding habitat along the river upstream of Casper by planting cottonwood trees or by placing suitable structures along the river for use by bald eagles during feeding activity.

BLM Actions Required; Opportunities for Public Participation

* BLM continue to offer oil and gas leases on lands within ¼ mile of the river subject to no surface occupancy stipulation, and within ½ mile of the river subject to seasonal occupancy stipulation. Review requests for modification of the ½ mile seasonal stipulation as received.

* Proposals for extraction of mineral materials on public lands within ¼ mile of the river would be rejected by BLM.

* When a decision is made, PRRA would inform the proponent in writing how to initiate review of the decision (usually a decision which a party believes is adverse may be appealed to IBLA).

* PRRA take administrative maintenance action to clarify RMP land use decisions and RMU management prescriptions specific to the identified 240 acres (RMU 7, ROD p. 54).

* BLM issue mineral material permit/sale on the 240 acres to a qualified applicant.

* PRRA appropriate funding through the annual budget process to make habitat improvements.

Rangelands

No bald eagle seasonal or occupancy restrictions, except as may be identified on a site specific basis to protect other wildlife or other resource values present, will be applied to rangelands feeding areas.

The BLM will develop a public education program for bald eagle feeding areas along the North Platte River and on public rangelands. Under the program, information will be distributed to landowners, grazing lessees, and the general public. Information will be designed to identify ways land users can avoid hazards to bald eagles, and benefit bald eagles using the feeding areas where possible.

BLM Actions Required; Opportunities for Public Participation

* As land use proposals are received, BLM will perform a site-specific analysis and incorporate mitigating measures where needed to protect resource values present in the area of the proposal.

* PRRA appropriate funding through the annual budget process to prepare and implement program. Estimated costs are outlined in the "Public Affairs" section of the final HMP and EA.

FLYWAYS

Actions proposed on public lands in known or other discovered bald eagle flyways will be analyzed on a case-by-case basis. Consultation with the FWS in accordance with the Endangered Species Act will be initiated if required. On approximately 2,640 acres of public lands in the Emigrant Gap flyway, located in T. 33 N., R. 81 W., sections 13, 14, 15, 23, 24, 25, and 25, new power distribution/transmission lines will have to be designed to reduce hazards to raptors from collisions with the proposed facilities in order to be authorized. Other proposed development or land use proposals will be subject to analysis on a case-by-case basis, with consultation with the FWS initiated if required.

BLM Actions Required; Opportunities for Public Participation

* PRRA take administrative maintenance action to clarify RMP land use decisions and RMU management prescriptions specific to the identified 2,640 acres (WL6, ROD p. 29).

* As land use proposals are received, BLM perform a site-specific analysis. Consultation with the FWS in accordance with the Endangered Species Act will be initiated if required.

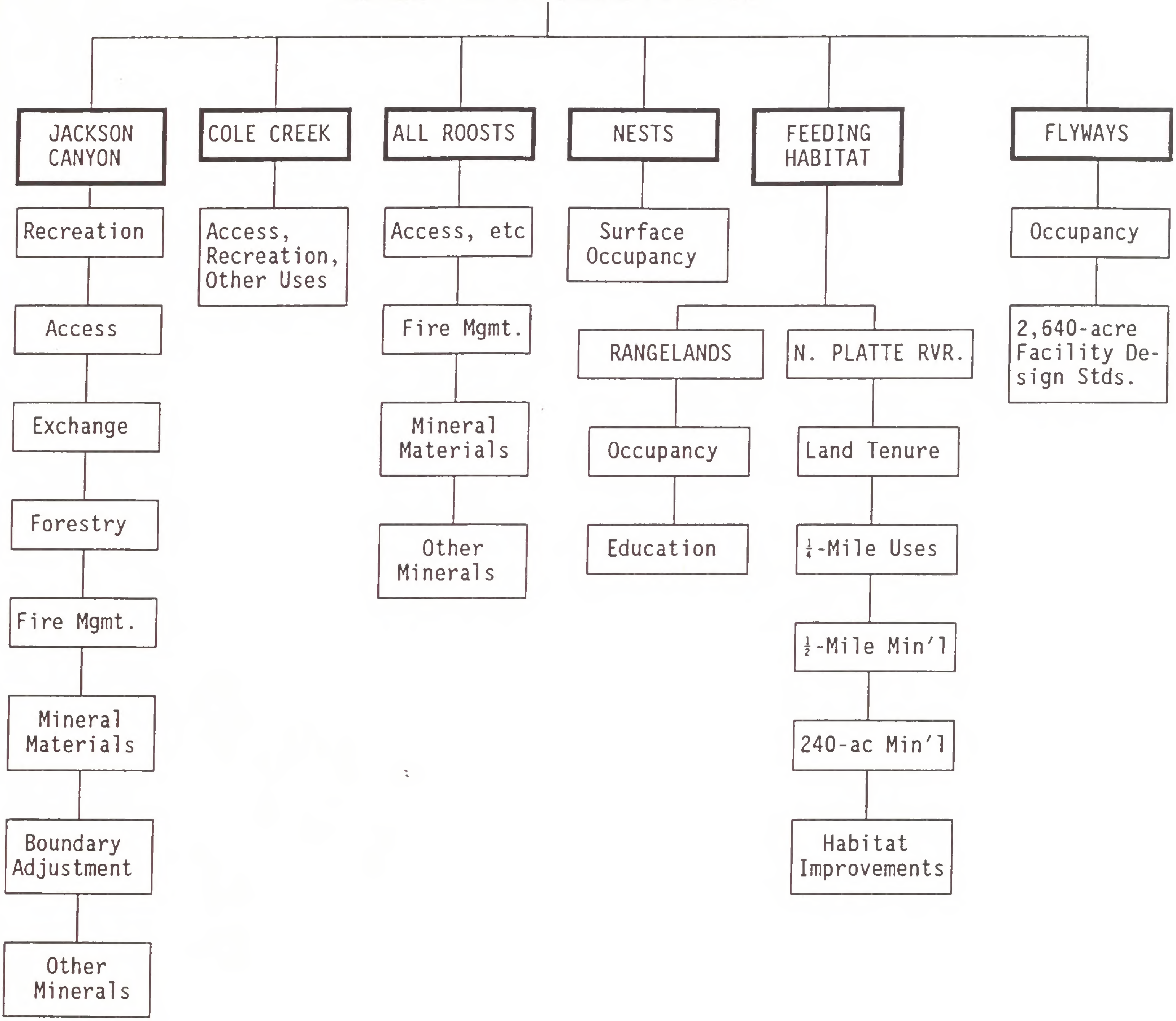
* PRRA will coordinate with proponents when construction of new power distribution/transmission lines is proposed on the identified public lands.

* When a decision is made, PRRA would inform the proponent in writing how to initiate review of the decision (usually a decision which a party believes is adverse may be appealed to IBLA).

APPENDIX B

PLATTE RIVER RESOURCE AREA AND JACKSON CANYON

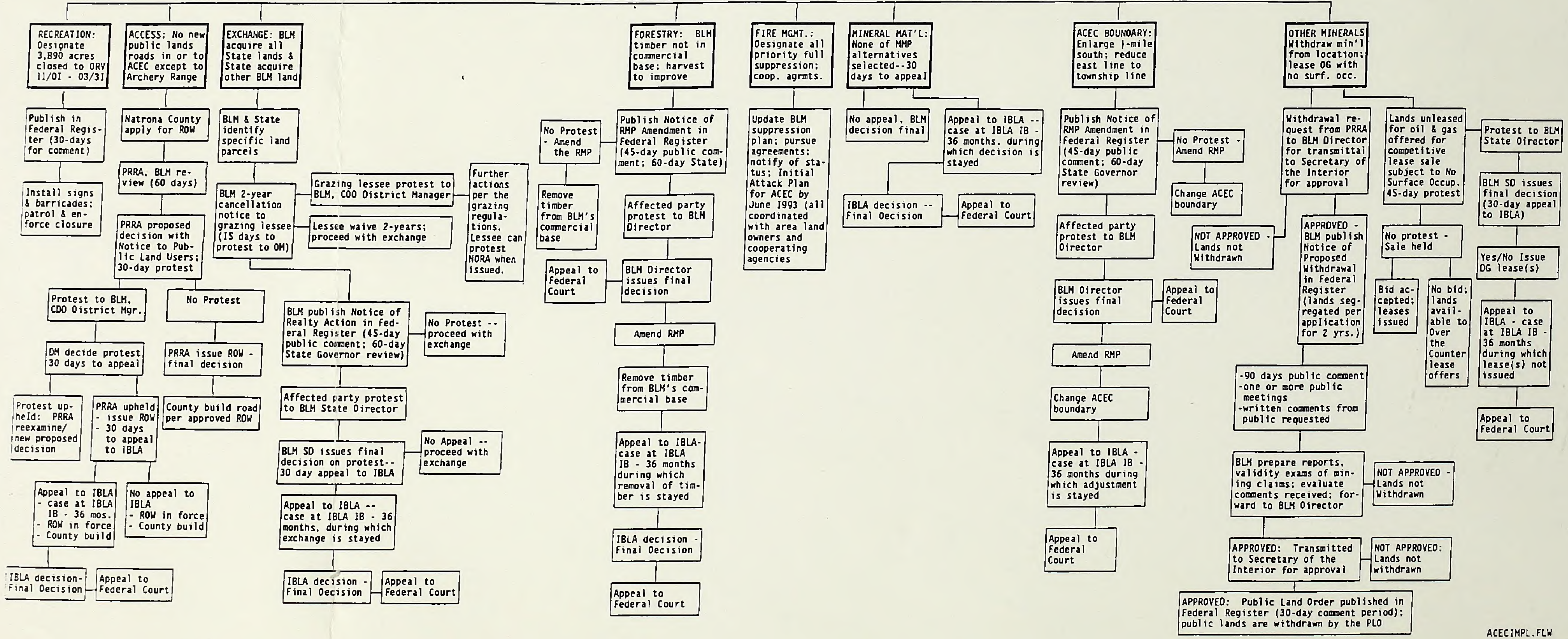
BALD EAGLE HABITAT MANAGEMENT PLAN *



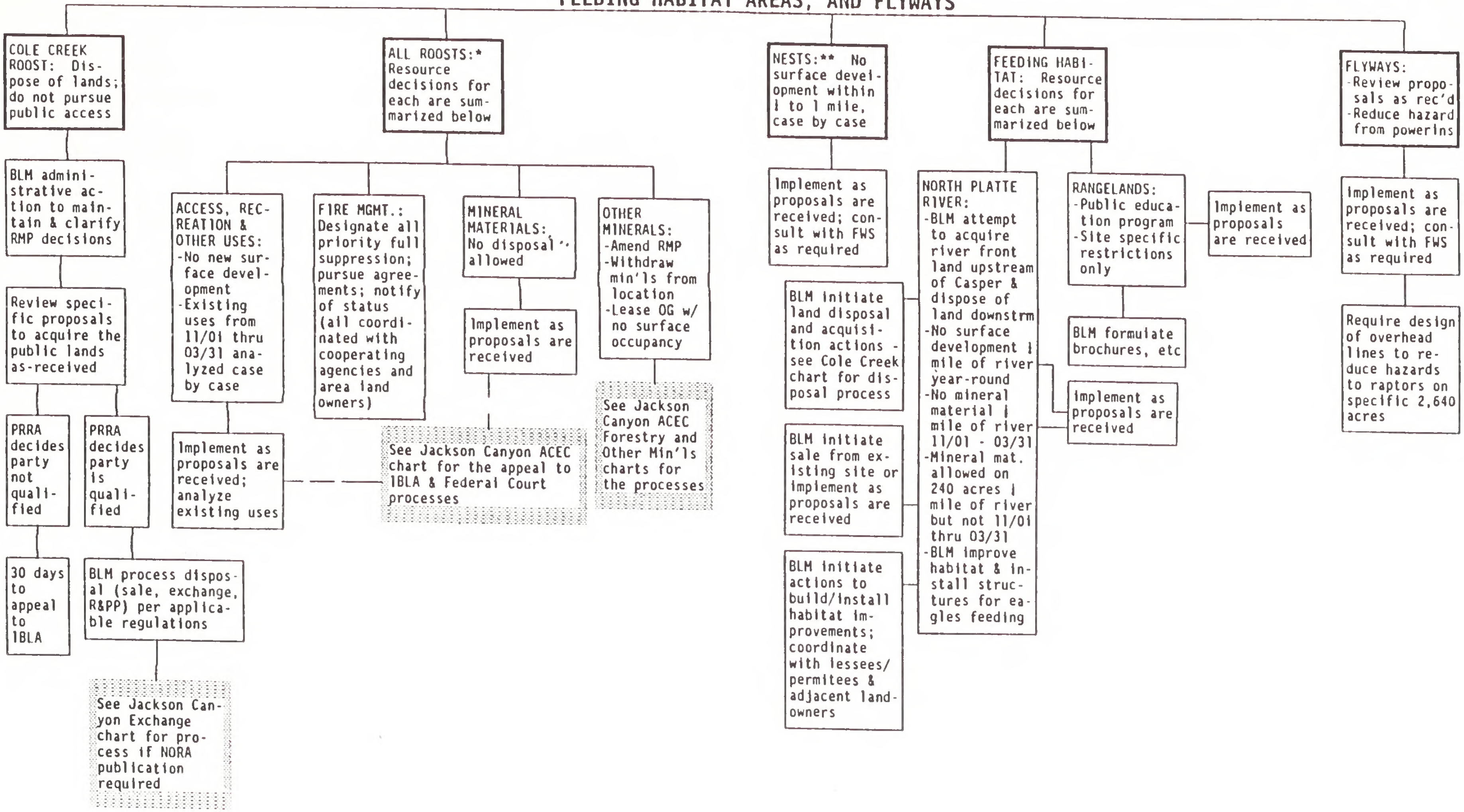
* Refer to flow charts "Actions to Implement HMP Decisions on Public Lands in the Jackson Canyon ACEC," and "Actions to Implement HMP Decisions on Public Lands in Roosts, Nests, Feeding Habitat Areas, and Flyways" for details on implementation of HMP decisions.

APPENDIX C

ACTIONS TO IMPLEMENT HMP DECISIONS ON PUBLIC LANDS IN THE JACKSON CANYON ACEC


RECREATION: Designate 3,890 acres closed to ORV 11/01 - 03/31
Publish in Federal Register (30-days for comment)
Install signs & barricades; patrol & enforce closure
ACCESS: No new public lands roads in or to ACEC except to Archery Range
Natrona County apply for ROW
PRRA, BLM review (60 days)
PRRA proposed decision with Notice to Public Land Users; 30-day protest
Protest to BLM, CDO District Mgr.
No Protest
DM decide protest 30 days to appeal
PRRA issue ROW - final decision
Protest upheld: PRRA reexamine/new proposed decision
PRRA upheld - issue ROW - 30 days to appeal to IBLA
County build road per approved ROW
Appeal to IBLA - case at IBLA IB - 36 mos. - ROW in force - County build
No appeal to IBLA - ROW in force - County build
IBLA decision-Final Decision
Appeal to Federal Court
EXCHANGE: BLM acquire all State lands & State acquire other BLM land
BLM & State identify specific land parcels
BLM 2-year cancellation notice to grazing lessee (15 days to protest to DM)
Grazing lessee protest to BLM, CDO District Manager
Lessee waive 2-years; proceed with exchange
Further actions per the grazing regulations. Lessee can protest NORA when issued.
BLM publish Notice of Realty Action in Federal Register (45-day public comment; 60-day State Governor review)
No Protest -- proceed with exchange
Affected party protest to BLM State Director
BLM SD issues final decision on protest--30 day appeal to IBLA
No Appeal -- proceed with exchange
Appeal to IBLA -- case at IBLA IB - 36 months, during which exchange is stayed
IBLA decision - Final Decision
Appeal to Federal Court
FORESTRY: BLM timber not in commercial base; harvest to improve
No Protest - Amend the RMP
Remove timber from BLM's commercial base
Appeal to Federal Court
Publish Notice of RMP Amendment in Federal Register (45-day public comment; 60-day State)
Affected party protest to BLM Director
BLM Director issues final decision
Amend RMP
Remove timber from BLM's commercial base
Appeal to IBLA-case at IBLA IB - 36 months during which removal of timber is stayed
IBLA decision - Final Decision
Appeal to Federal Court
FIRE MGMT.: Designate all priority full suppression; coop. agrmts.
Update BLM suppression plan; pursue agreements; notify of status; Initial Attack Plan for ACEC by June 1993 (all coordinated with area land owners and cooperating agencies
MINERAL MAT'L: None of MMP alternatives selected--30 days to appeal
No appeal, BLM decision final
Appeal to IBLA -- case at IBLA IB - 36 months, during which decision is stayed
IBLA decision -- Final Decision
Appeal to Federal Court
ACEC BOUNDARY: Enlarge ½-mile south; reduce east line to township line
Publish Notice of RMP Amendment in Federal Register (45-day public comment; 60-day State Governor review)
No Protest - Amend RMP
Change ACEC boundary
Affected party protest to BLM Director
BLM Director issues final decision
Appeal to Federal Court
Amend RMP
Change ACEC boundary
Appeal to IBLA - case at IBLA IB - 36 months during which adjustment is stayed
Appeal to Federal Court
OTHER MINERALS Withdraw min'l from location; lease OG with no surf. occ.
Withdrawal request from PRRA to BLM Director for transmittal to Secretary of the Interior for approval
NOT APPROVED - Lands not Withdrawn
APPROVED - BLM publish Notice of Proposed Withdrawal in Federal Register (lands segregated per application for 2 yrs.)
-90 days public comment
-one or more public meetings
-written comments from public requested
BLM prepare reports, validity exams of mining claims; evaluate comments received: forward to BLM Director
NOT APPROVED - Lands not Withdrawn
APPROVED: Transmitted to Secretary of the Interior for approval
NOT APPROVED: Lands not withdrawn
APPROVED: Public Land Order published in Federal Register (30-day comment period); public lands are withdrawn by the PLO
Lands unleased for oil & gas offered for competitive lease sale subject to No Surface Occup. 45-day protest
No protest - Sale held
Bid accepted; leases issued
No bid; lands available to Over the Counter lease offers
Protest to BLM State Director
BLM SD issues final decision (30-day appeal to IBLA)
Yes/No Issue OG lease(s)
Appeal to IBLA - case at IBLA IB - 36 months during which lease(s) not issued
Appeal to Federal Court
ACECIMPL.FLW

ACTIONS TO IMPLEMENT HMP DECISIONS ON PUBLIC LANDS IN ROOSTS, NESTS, FEEDING HABITAT AREAS, AND FLYWAYS


COLE CREEK ROOST: Dispose of lands; do not pursue public access
BLM administrative action to maintain & clarify RMP decisions
Review specific proposals to acquire the public lands as-received
PRRA decides party not qualified
30 days to appeal to IBLA
PRRA decides party is qualified
BLM process disposal (sale, exchange, R&PP) per applicable regulations
See Jackson Canyon Exchange chart for process if NORA publication required
ALL ROOSTS:* Resource decisions for each are summarized below
ACCESS, RECREATION & OTHER USES: -No new surface development -Existing uses from 11/01 thru 03/31 analyzed case by case
Implement as proposals are received; analyze existing uses
FIRE MGMT.: Designate all priority full suppression; pursue agreements; notify of status (all coordinated with cooperating agencies and area land owners)
MINERAL MATERIALS: No disposal allowed
Implement as proposals are received
See Jackson Canyon ACEC chart for the appeal to IBLA & Federal Court processes
OTHER MINERALS: -Amend RMP -Withdraw min'ls from location -Lease OG w/ no surface occupancy
See Jackson Canyon ACEC Forestry and Other Min'ls charts for the processes
NESTS:** No surface development within ½ to 1 mile, case by case
Implement as proposals are received; consult with FWS as required
FEEDING HABITAT: Resource decisions for each are summarized below
NORTH PLATTE RIVER: -BLM attempt to acquire river front land upstream of Casper & dispose of land downstrm -No surface development ½ mile of river year-round -No mineral material ½ mile of river 11/01 - 03/31 -Mineral mat. allowed on 240 acres ½ mile of river but not 11/01 thru 03/31 -BLM improve habitat & install structures for eagles feeding
BLM initiate land disposal and acquisition actions - see Cole Creek chart for disposal process
BLM initiate sale from existing site or implement as proposals are received
BLM initiate actions to build/install habitat improvements; coordinate with lessees/permitees & adjacent landowners
Implement as proposals are received
RANGELANDS: -Public education program -Site specific restrictions only
BLM formulate brochures, etc
Implement as proposals are received
FLYWAYS: -Review proposals as rec'd -Reduce hazard from powerlns
Implement as proposals are received; consult with FWS as required
Require design of overhead lines to reduce hazards to raptors on specific 2,640 acres

* Roosts: Stinking Creek, Cole Creek, Boxelder Creek, Little Deer Creek, Pine Mountain West, Pine Mountain East, Big Sulfur Springs, North Fork Cheyenne River, Pine Ridge, and Miller Hills roosts.

** Nests: Careyhurst, Rawhide, and/or nest(s) discovered in the future.

APPENDIX E

Form 6780-2
(July 1981)
(formerly 6620-3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HABITAT MANAGEMENT PLAN PROGRESS REPORT

OBJECTIVES	DATE COMPLETED	PLANNED ACTIONS	DATE COMPLETED	EVALUATION/MONITORING	DATE COMPLETED
1. BALD EAGLE ROOSTS Improve or maintain existing 11,101 acres and any additional acquired acreage of night communal roosting habitat in the ACEC.		JACKSON CANYON ACEC Recreation - limit vehicle use on 3,890 acres Access - authorize a road right-of-way Exchange - acquire state lands in ACEC & dispose of public lands outside ACEC Forestry - remove 1,323 acres from commercial timber base - implement forest stand improvement Fire Management - designate as priority full suppression zone - pursue cooperative agreements with private landowners and agencies - implement prescribed burning ACEC Boundary Adjustment and Mineral Materials - enlarge the southwestern boundary by ¼ mile - reduce eastern boundary to Township line - minerals outside the boundary will be available for development		Bald eagle roost counts Roost habitat surveys of canopy cover, stocking density, and competition Treatments (if needed) of disease or insect infestations Public use surveys (and compliance)	

INSTRUCTIONS

1. List specific HMP objectives as developed from RMP/MFP planning documents or as otherwise approved.
2. List specific planned actions to be initiated to meet each specific objective.
3. List scheduled evaluation/monitoring study(s) planned to evaluate accomplishments.
4. Enter completion date for each objective, action, or evaluation/monitoring study as accomplished.

GPO 841-060

Form 6780–2
(July 1981)
(formerly 6620–3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HABITAT MANAGEMENT PLAN PROGRESS REPORT

OBJECTIVES	DATE COMPLETED	PLANNED ACTIONS	DATE COMPLETED	EVALUATION/MONITORING	DATE COMPLETED
Improve or maintain existing 26,425 acres and any discovered acreage of night communal roost habitat in other parts of the resource area.		Other Minerals – withdraw locatable minerals – lease oil and gas minerals with NSO year-round OTHER RESOURCE AREA ROOSTS Access and Recreation – public lands in Cole Creek roost are available for disposal – restrict surface developments and improvement of roads and legal access Fire Management – designate as priority full suppression zone – pursue cooperative agreements with private landowners and agencies – implement prescribed burning Minerals Management – oil and gas leased with NSO year-round – mineral materials are not available – withdraw locatable minerals		Bald eagle roost counts Roost habitat surveys of canopy cover, stocking density, and competition Treatments (if needed) of disease or insect infestations Public use surveys (and compliance)	

INSTRUCTIONS

1. List specific HMP objectives as developed from RMP/MFP planning documents or as otherwise approved.
2. List specific planned actions to be initiated to meet each specific objective.
3. List scheduled evaluation/monitoring study(s) planned to evaluate accomplishments.
4. Enter completion date for each objective, action, or evaluation/monitoring study as accomplished.

Form 6780–2
(July 1981)
(formerly 6620–3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HABITAT MANAGEMENT PLAN PROGRESS REPORT

OBJECTIVES	DATE COMPLETED	PLANNED ACTIONS	DATE COMPLETED	EVALUATION/MONITORING	DATE COMPLETED
2. NESTS Maintain or improve nesting habitat for any identified nests.		No surface development within ¼ to 1 mile of nests.		Conduct nesting surveys. Survey public use.	
3. FEEDING AREAS Improve or maintain existing 1,285 acres and any acquired acreage of North Platte River habitat.		NORTH PLATTE RIVER FEEDING HABITAT - acquire land upstream of Casper; dispose of public land downstream of Casper - no surface development within ¼ mile of the North Platte River - no surface development within ½ mile of the river from November 1 through March 31. - on 240 acres along the river, allow surface development except from November 1 through March 31 - plant cottonwood trees or place other structures for bald eagle perching		Survey bald eagle use at river concentration feeding areas. Survey public use (compliance) Check cottonwood trees and structure.	

INSTRUCTIONS

1. List specific HMP objectives as developed from RMP/MFP planning documents or as otherwise approved.
2. List specific planned actions to be initiated to meet each specific objective.
3. List scheduled evaluation/monitoring study(s) planned to evaluate accomplishments.
4. Enter completion date for each objective, action, or evaluation/monitoring study as accomplished.

Form 6780-2
(July 1981)
(formerly 6620-3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HABITAT MANAGEMENT PLAN PROGRESS REPORT

OBJECTIVES	DATE COMPLETED	PLANNED ACTIONS	DATE COMPLETED	EVALUATION/MONITORING	DATE COMPLETED
Improve or maintain known bald eagle habitat.		RANGELANDS FEEDING HABITAT - develop a public education program		Survey livestock operations to identify usefulness of the public education program.	
4. FLYWAYS					
Manage flyway habitat to avoid hazards to bald eagles.		On 2,640 acres in Emigrant Gap Flyway, require raptor design specifications on new power lines		Survey bald eagle use at flyways. Public use surveys (and compliance).	

INSTRUCTIONS

1. List specific HMP objectives as developed from RMP/MFP planning documents or as otherwise approved.
2. List specific planned actions to be initiated to meet each specific objective.
3. List scheduled evaluation/monitoring study(s) planned to evaluate accomplishments.
4. Enter completion date for each objective, action, or evaluation/monitoring study as accomplished.

GPO 841-060

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Platte River Resource Area
P.O. Drawer 2420
Mills, Wyoming 82644

TAKE PRIDE IN AMERICA

6780
JC-PRRA HMP

JUN 19 1992

Dear Interested Citizen:

The Bald Eagle Habitat Management Plan (HMP) for the Platte River Resource Area and Jackson Canyon Area of Critical Environmental Concern (ACEC), and the Decision Record for the HMP was released June 19, 1992.

Early last year, we determined it was necessary to complete a site-specific analysis of the foreseeable actions on public lands that could affect bald eagle habitat and populations in the ACEC and other roosting areas in Natrona, Converse, Platte and Goshen counties. The anticipated human activities were limestone mining, increased recreation activities, access, and timber harvest, to name a few. These actions were considered in the HMP and associated environmental assessment. After reviewing the potential impacts on bald eagle habitat in consultation with my staff, the U. S. Fish and Wildlife Service, and the Wyoming Game and Fish Department, I have signed the Decision Record which lists the management actions that will be implemented in order to meet the BLM's obligations under the Endangered Species Act and other laws and regulations.

The actions approved by the Decision Record are described in the enclosed summary sheet. If you have any questions regarding the HMP and Decision Record, a public Open House is scheduled for June 26, from 1:00 p.m. to 7:00 p.m. at the Platte River Resource Area Office, 815 Connie Street, Mills, Wyoming, where resource specialists will be of assistance. The Decision Record and approved HMP are BLM's final decision document, and therefore can be appealed to the Secretary of Interior's Board of Land Appeals if you believe it is in error. There are a number of opportunities for public participation as each of the actions outlined in the decision is implemented; those are outlined in the Decision Record and HMP.

The HMP and Decision Record have been mailed to the parties on the attached list. Because we have limited copies, we are requiring written requests for a copy if you are unable to gain access to one of the copies distributed to the public locations throughout the resource area.

We appreciate your continued interest in the BLM's planning process and encourage your involvement as we proceed to implement HMP decisions to protect and benefit bald eagle habitat and populations on public lands in the Platte River Resource Area.

Sincerely,

William H Mortimer

William H. Mortimer
Area Manager, Platte River Resource Area

Enclosures (2)
-- Summary of Decision Record
-- HMP Distribution List

Bureau of Land Management
Casper District
Platte River Resource Area
P.O. Box 2420, 815 Connie Street
Mills, Wyoming 82644

SUMMARY
of the
DECISION RECORD
for the
Bald Eagle Habitat Management Plan for the Platte River Resource Area and Jackson Canyon Area of Critical Environmental Concern (ACEC)

The following summarizes the Decision Record for the Bald Eagle Habitat Management Plan (HMP) completed in May 1992 by the BLM, Platte River Resource Area. The HMP and decision record address management of bald eagle habitat on BLM-administered *public lands* in Natrona, Converse, Platte and Goshen counties. Bald eagle habitat includes roosts, nests, feeding areas, and flyways. The complete decision record for the HMP includes a more detailed description of the management actions selected and identifies reasons for the decision. Additional BLM actions required to implement the decision, and opportunities for further public participation in management of bald eagle habitat on public lands, are also listed. The decision is based on consideration of the resource issues defined in the draft and final HMP and environmental assessment (EA); the environmental consequences of the alternatives; public comments received during scoping and on the draft HMP and EA; the results of consultations with the U.S. Fish and Wildlife Service (FWS) and Wyoming Game and Fish Department; and, the results of consultations with county and Wyoming state government, private industries, landowners, and public land user groups and individuals.

BALD EAGLE ROOSTS

JACKSON CANYON ACEC

Recreation -- Off road vehicle (ORV) travel in the ACEC will be limited to designated roads and vehicle routes on 3,890 acres of federal surface lands within the ACEC boundary. Use of the designated routes on federal lands by ORVs will not be allowed from November 1 through March 31, except when BLM administrative access is determined necessary.

Access -- Construction of new roads and other facilities on public lands within or leading directly to the ACEC will not be authorized, with the following exception: a 60-foot wide road to the archery range on the public land may be authorized by right-of-way, and such right-of-way will allow year-round occupancy. Stipulations in the archery range development plan will prohibit winter vehicle access on public land beyond the archery range.

Exchange -- Exchange will be pursued to acquire all state of Wyoming lands within or adjacent to the ACEC; public lands located outside the ACEC area (to be identified by the state of Wyoming) would be disposed of by exchange to the state of Wyoming. This includes disposal by exchange to the state of Wyoming of public lands outside the ACEC boundary that contain limestone deposits. If mineral development were proposed on those lands, such development will be subject to access and blasting limitations from November 1 through March 31.

Forestry -- The acreage identified for timber harvest in the ACEC will be removed from BLM's commercial base. Timber will be actively managed and silvicultural practices implemented to obtain healthy aged and structured stands for the benefit of bald eagle roosting habitat.

Fire Management -- All federal lands within or adjacent to the ACEC will be designated as priority full suppression zones, which may include full suppression of wildfires with all available resources. Any surface disturbance from suppression efforts will be restored immediately after the fire is suppressed. To the extent possible, trees will not be cut within 200 yards of the roosts during fire suppression.

The BLM will pursue cooperative agreements so that an initial attack plan may be established for use in an escaped fire situation analysis plan when needed. Plans will identify areas where grading of roads and/or firebreaks are most needed, and identify areas where protection from wildfires is most critical. Prescribed burning will be implemented where necessary, but will not be allowed from November 1 through March 31.

ACEC Boundary Adjustment -- The boundary will be enlarged approximately ¼ mile to the south, making use of topographical features to screen bald eagle roosts. Minerals located outside the revised ACEC boundary will be available for development. Mineral development on those lands will be subject to access and blasting limitations from November 1 through March 31.

The boundary in the eastern portion of the area will be reduced to the township line between Ranges 79 and 80 West, which will become the eastern ACEC boundary.

Other Minerals -- Federal mineral estate in the ACEC will be withdrawn from location and appropriation under the mining laws. All federal minerals in the ACEC will be available for oil and gas leasing and development, subject to year-round no surface occupancy.

OTHER RESOURCE AREA ROOSTS

The Cole Creek Roost is addressed separately for the resource values "Access, Recreation, and Other Land Uses." Where "All Roosts" are identified, all roosts (except the Jackson Canyon ACEC) are addressed.

Access, Recreation, and Other Land Uses

Cole Creek Roost -- The public lands will be available for disposal to entities that will manage the land to maintain the resource values present. Acquisition of lands or access easements will not be pursued.

All Roosts -- No new roads or other surface developments will be authorized. No disturbance to trees, or improvements of roads or legal access will be allowed except as needed for fire suppression or for bald eagle habitat improvement or maintenance.

Fire Management, **All Roosts** -- All federal lands within or adjacent to roosts will be designated as priority full suppression zones, which may include full suppression of wildfires with all available resources. Any surface disturbance from suppression efforts will be restored immediately after the fire is suppressed. To the extent possible, trees will not be cut within 200 yards of the roosts during fire suppression.

The BLM will pursue cooperative agreements so that an initial attack plan may be established for use in an escaped fire situation analysis plan when needed. Plans will identify areas where grading of roads and/or firebreaks are most needed, and identify areas where protection from wildfires is most critical. Prescribed burning will be implemented where necessary, but will not be allowed from November 1 through March 31.

Minerals, **All Roosts** -- All BLM-administered lands and mineral estate will remain open to oil and gas leasing and development subject to year-round no surface occupancy. The no surface occupancy stipulation will apply to maintenance and operation of producing wells. The no surface occupancy stipulation, unless currently a condition of an existing lease or authorization, does not apply to maintenance and operation of existing lease facilities. All BLM-administered lands and mineral estate in bald eagle roost areas will be withdrawn from location and appropriation under the mining laws. Mineral materials will not be available for disposal.

BALD EAGLE NESTS

On public lands, surface development will be prohibited on an area from ¼ to 1 mile of known or discovered nests. The specific area will be determined on a case-by-case basis after consultation with the FWS in accordance with the Endangered Species Act.

BALD EAGLE FEEDING AREAS

North Platte River -- BLM will attempt to acquire riverfront land along the North Platte River upstream of Casper and dispose of BLM-administered lands along the river downstream of Casper. The downstream lands will be available for disposal to parties that will manage the land to maintain the resource values present.

Surface development will be prohibited within ¼ mile of the North Platte River on a year-round basis. This limitation will not apply to recreation or habitat improvement projects. Mineral material or other surface development on specific parcels within ½ mile of the river will not be allowed from November 1 through March 31. The seasonal limitation does not apply to maintenance and operation of existing or producing mineral facilities.

On a specified 240, acres federal mineral material development will be allowed within ¼ mile of the North Platte River, subject to no surface occupancy from November 1 through March 31.

The BLM will improve bald eagle feeding habitat along the river upstream of Casper by planting cottonwood trees or by placing suitable structures along the river for use by bald eagles during feeding activity.

Rangelands -- No bald eagle seasonal or occupancy restrictions, except as may be identified on a site-specific basis to protect other wildlife or other resource values present, will be applied. BLM will develop a public education program for bald eagle feeding areas. Information will be distributed to landowners, grazing lessees, and the general public. This information will be designed to identify ways in which land users can avoid hazards to bald eagles, and benefit bald eagles using the feeding areas where possible.

FLYWAYS

Actions proposed on public lands in known or other discovered bald eagle flyways will be analyzed on a case-by-case basis. On 2,640 acres of public lands in the Emigrant Gap flyway, new power lines must be designed to reduce hazards to raptors from collisions with the proposed facilities in order to be authorized. Other proposed development or land use proposals will be subject to analysis on a case-by-case basis, with consultation with the FWS initiated if required.

BALD EAGLE HMP MAILING ADDRESSES

Casper Mountain Fire District
Natrona County Parks Department
c/o Sam Weaver, Director
4621 CY Avenue
Casper, WY 82604

Converse County Commissioners
John Pexton, Chairman
107 North 5th
Douglas, WY 82633

Converse County Fire Department
c/o Converse County Commissioners
107 North 5th
Douglas, WY 82633

Converse County Library
300 Walnut
Douglas, WY 82633

Goshen County Commissioners
Chairman
P. O. Box 160
Torrington, WY 82440

Goshen County Library
2001 East A
Torrington, WY 82240

Cathy Killean
Friends of Bessemer Mountain
5138 Alcova Route, Box 3
Casper, WY 82604

Murie Audubon Society
Tom Varcalli, President
P. O. Box 2112
Casper, WY 82602

Natrona County Commissioners
Jim Sandison, Chairman
200 North Center, Room 115
Casper, WY 82601

Natrona County Fire Department
Drawer 848
Mills, WY 82644

Natrona County Library
302 East Second Street
Casper, WY 82601

Natrona County Parks Department
Sam Weaver, Director
4621 CY Avenue
Casper, WY 82604

Natrona County Planning Department
Jim Brockett, County Planner
P. O. Box 610
Mills, WY 82644

The Nature Conservancy
Ben Pierce
Richard G. Studenmund
P. O. Box 450
Lander, WY 82520

Peggy Peterson
Casper District Advisory Council
3519 Partridge Lane
Casper, WY 82604

Petroleum Association of Wyoming
Cheryl M. Feraud
951 Werner Court, No. 100
Casper, WY 82601

Platte County Commissioners
County Courthouse
Wheatland, WY 82201

Platte County Library
904 Ninth Street
Wheatland, WY 82201

Rissler and McMurry Company
Ernest M. Skretteberg, Safety Director
W. N. McMurry, President
P. O. Box 2499
Casper, WY 82602

Rocky Mountain Oil and Gas Association
1860 Lincoln Street, Suite 404
Denver, CO 80295

Sierra Club
Connie Wilbert, President
615½ Clark Street
Laramie, WY 82070

Alan Simpson, United States Senator
Cherie Burn, Aid
3003 Federal Building
Casper, WY 82601

Craig Thomas, United States Congressman
Bobbie Brown, Aid
4003 Federal Building
Casper, WY 82601-1969

Malcolm Wallop, United States Senator
Sue Cole, Special Assistant
2201 Federal Building
Casper, WY 82601

Wyoming Highway Department
Merwin Moore, District 2 Engineer
P. O. Box 2199
Casper, WY 82602

Wyoming Mining Association
Jack Ratchye, Executive Director
P. O. Box 866
Cheyenne, WY 82003

Wyoming State Land and Farm Loan Office
Howard Schriner, Director
122 W. 25th St., Herschler Bldg.
Cheyenne, WY 82002-0600

Wyoming State Forestry Division
Bryce E. Lundell, State Forester
1100 West 22nd Street
Cheyenne, WY 82002

Wyoming State Planning
Coordination Office
Rod Miller
Hershler Building, Second Floor East
Cheyenne, WY 82002

Form 1842–1
(February 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS

1. This decision is adverse to you,

AND

2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL . . . . Within 30 days file a *Notice of Appeal* in the office which issued this decision (see 43 CFR Secs. 4.411 and 4.413). You may state your reasons for appealing, if you desire.

2. WHERE TO FILE NOTICE OF APPEAL . . .

Platte River Resource Area
P. O. Box 2420
Mills, WY 82644

SOLICITOR ALSO COPY TO . . . .

Regional Solicitor, Rocky Mountain Region
U. S. Department of the Interior
P. O. Box 25007
Denver Federal Center
Denver, CO 80225

3. STATEMENT OF REASONS . . Within 30 days after filing the *Notice of Appeal,* file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of the Secretary, Board of Land Appeals, 4015 Wilson Blvd., Arlington, Virginia 22203 (see 43 CFR Sec. 4.412 and 4.413). If you fully stated your reasons for appealing when filing the *Notice of Appeal,* no additional statement is necessary.

SOLICITOR ALSO COPY TO . . . .

Regional Solicitor, Rocky Mountain Region
U. S. Department of the Interior
P. O. Box 25007
Denver Federal Center
Denver, CO 80225

4. ADVERSE PARTIES . . . . Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the *Notice of Appeal*, (b) the Statement of Reasons, and (c) any other documents filed (see 43 CFR Sec. 4.413). Service will be made upon the Associate Solicitor, Division of Energy and Resources, Washington, D.C. 20240, instead of the Field or Regional Solicitor when appeals are taken from decisions of the Director (WO–100).

5. PROOF OF SERVICE . . . . Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of the Secretary, Board of Land Appeals, 4015 Wilson Blvd., Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (see 43 CFR Sec. 4.401(c)(2)).

Unless these procedures are followed your appeal will be subject to dismissal (see 43 CFR Sec. 4.402). Be certain that all communications are identified by serial number of the case being appealed.

NOTE: *A document is not filed until it is actually received in the proper office (see 43 CFR Sec. 4.401(a))*

SUBPART 1821.2--OFFICE HOURS; TIME AND PLACE FOR FILING

Sec. 1821.2-1 *Office hours of State Offices.* (a) State Offices and the Washington Office of the Bureau of Land Management are open to the public for the filing of documents and inspection of records during the hours specified in this paragraph on Monday through Friday of each week, with the exception of those days where the office may be closed because of a national holiday or Presidential or other administrative order. The hours during which the State Offices and the Washington Office are open to the public for the filing of documents and inspection of records are from 10 a.m. to 4 p.m., standard time or daylight saving time, whichever is in effect at the city in which each office is located.

Sec. 1821.2-2(d) Any document required or permitted to be filed under the regulations of this chapter, which is received in the State Office or the Washington Office, either in the mail or by personal delivery when the office is not open to the public shall be deemed to be filed as of the day and hour the office next opens to the public.

(e) Any document required by law, regulation, or decision to be filed within a stated period, the last day of which falls on a day the State Office or the Washington Office is officially closed, shall be deemed to be timely filed if it is received in the appropriate office on the next day the office is open to the public.

* * * * *

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MAP 18

ER'S CARD

DATE RETURNED

OFFICE

(Continued on reverse)

QL 696 .F32 P538 1992
U. S. Bureau of Land
Management. Platte River
Platte River Resource Area
and Jackson Canyon ACEC

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DENVER, CO 80225

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R 79 W
T 32 N
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BESSEMER BEND
CASPER MOUNTAIN
Jackson Canyon
WYOMING GIRL SCOUTS LEASE
WYOMING GIRL SCOUTS PATENT
ARCHERY RANGE PATENT
CALVARY BAPTIST GIRLS' EASEMENT
ACEC BOUNDARY ADJUSTMENT ALTERNATIVE
ACEC BOUNDARY ADJUSTMENT ALTERNATIVE
ALTERNATIVE "C"
ALTERNATIVE "B"
ALTERNATIVE "A" (EXISTING)
Dry Lakes
Red Creek
Little Red Creek
Bates Creek
BLM ADMINISTERED LANDS
STATE LANDS
PRIVATE LANDS INCLUDED IN A CONSERVATION EASEMENT

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASPER DISTRICT OFFICE

JACKSON CANYON ACEC
MINERAL MATERIALS ALTERNATIVES
AND
BOUNDARY ADJUSTMENT ALTERNATIVE

DESIGNED BY: SCALE:
DRAFTED BY: DATE:
APPROVED BY: SHEET OF

MAP 18